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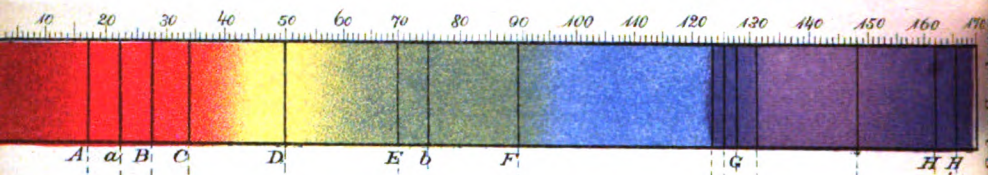
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Plate I.

Scales from the Drawings of Bunsen & Kirchhoff.



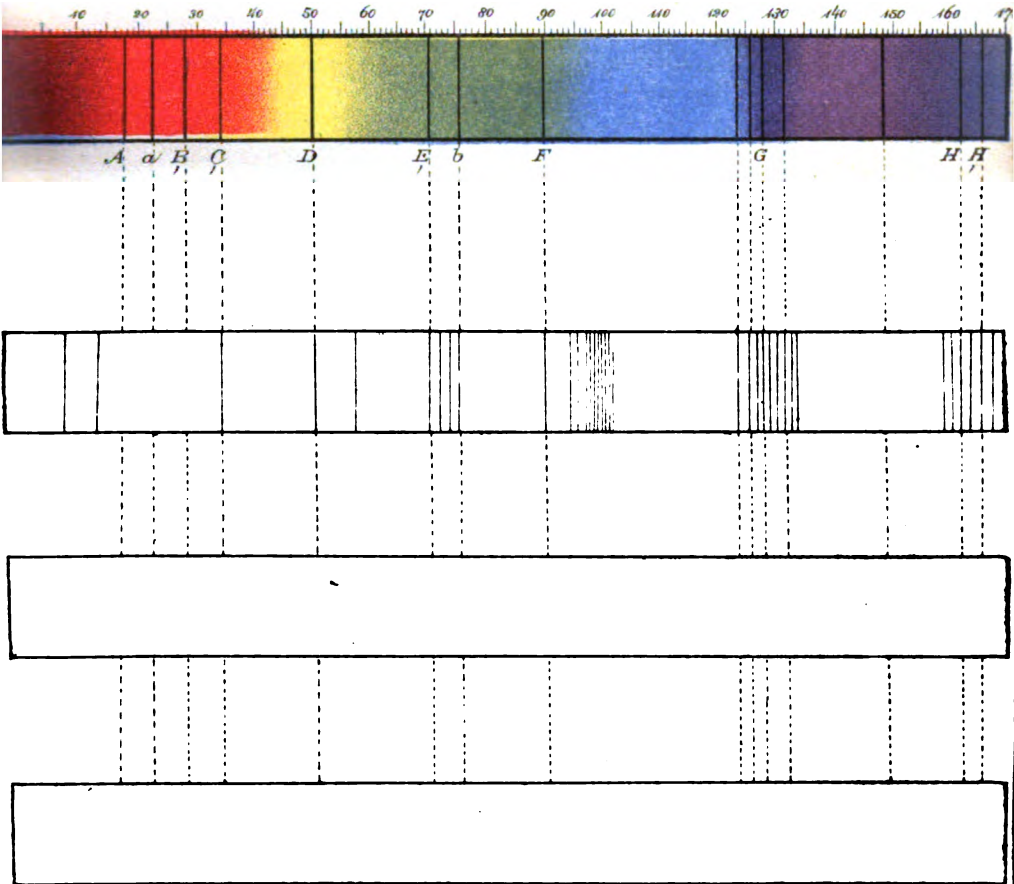
Blood Bands

Blood & Magenta

Blood, Magenta & Sulphite of Soda

Plate II.

Scales from the Drawings of Bunsen & Kirchhoff.



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ORIGINAL COMMUNICATIONS.

SPECTRUM ANALYSIS OF BLOOD.*

BY W. H. PITT, M. D.

THE advance made within a few years in molecular physics through a better knowledge of radiant light, affords a guide in investigations which lead to a clearer understanding of the phenomena of life.

Vague ideas and traditional notions have been abandoned for the more rational view which science points out in dealing with the growth and decay of organisms. The physicist and physiologist knowing this have only to do with facts, and so far as actual knowledge is concerned their interpretation. The days of speculative philosophy and the enchantments of classical story, have passed away. It is no wonder that, listening to illusions all up the restless ages, it took man so many generations to find out any thing positive of himself or his surroundings.

The discovery of the circulation of the blood by Dr. Harvey marked a new era in human progress. It is sad to think that up to his time so little had been done for physiology. But with its extensive literature, and illustrations drawn from every source of

* Read before the Buffalo Medical Club.

the animal and vegetable kingdom there is much unknown, and which demands careful study. Chemical analysis and microscopical observation, however, have accomplished about all that we can expect in determining the composition of the blood and its different aspects. To the spectroscope which is comparatively new and not in general use, we must look, year by year, for further information.

In the examination of blood, which is here submitted for your consideration, I have employed an instrument of four dense flint glass prisms. They have the advantage of widely separating the D line, and in giving broader absorption bands than those which are commonly seen in chromolith. plate. My first experiment consisted in putting a drop or two of arterial blood in a glass cell containing distilled water, in order to secure the absorption bands which are shown in plate I, strip 1. These are the well-known signs of aerated blood when diluted with water, or, as we shall see hereafter, when examined during circulation in the arteries. Strip 2, plate I, is a solution of blood and magenta, in which we see the blood bands are completely occluded. After adding sulphite of soda the wide overshadowing band due to the aniline red disappears, and the others remain unchanged. See plate I, strip 3. It is well known that a solution of cochineal and alum affords bands very similar to blood, as they occupy nearly the same spectral space, and are likely to deceive the unpracticed eye. A little boric acid added increases their refrangibility, and if blood be present it can be detected as before indicated.

Some vegetable reds also display absorption bands similar to blood; but they are always removed on addition of ammonia or a chemical re-agent which will not act upon blood—sulphite of potash, for instance. Generally speaking it is safe to conclude, and I am not aware that there is a single exception to this rule, that if the proper precaution be taken, the absorption bands of the red corpuscles may always be restored. So that, according to these and similar tests, no matter what the coloring matter in

solution, the spectroscope can absolutely determine either the presence or absence of blood.

I must not dwell, however, upon a part of the subject which has been so ably investigated in all its details by more competent observers.

The object of this paper is to bring forward a few results in spectrum analysis, which, as far as known, are here for the first time described.

The question referred to the spectroscope to answer was: "What are the elementary constituents of blood vapor in a Torricellian vacuum?" Toward a satisfactory solution a Geissler tube, open at one end, was connected with a glass tube thirty-four inches long, and the whole arrangement filled with mercury. After inverting and opening the end under mercury the column settled down till checked by atmospheric pressure. A few drops of fresh arterial blood were then introduced, and rose to the surface of the mercurial column; and of course was free to vaporize and fill the vacuum. The tube containing the vapor was then hermetically sealed and detached by the blow-pipe. On sending a current of electricity through, of sufficient tension to make it highly luminous, I brought it before the slit and with a comparison spectrum, located according to coincidence the following lines, which see plate II, strip 1. It will be noticed that the oxygen, hydrogen, and nitrogen lines are brought out, and also that there are some bands which are possibly due to nitrous oxide. The spectrum is somewhat complex, and the greater portion of it slightly luminous. Now, whether the oxygen comes from solution, from carbonic acid, or from aqueous vapor, I am unable to say.

But the two hydrogen lines undoubtedly come from water, while the nitrogen might be naturally suspected as escaping from solution. At some time not far distant, I hope to arrive at something more positive in reference to these gaseous lines. By testing the oxyhaemoglobin alone in a Torricellian vacuum, I may be able to announce the comparative chemical affinity or adhesion

which exists between the red corpuscles and oxygen. Should venous blood be subjected to a similar process in a vacuum, I am inclined to the opinion that the carbonic acid which it holds could be more accurately determined than by the usual methods of analysis. To answer fully, however, many points which are naturally suggested in reference to these gases in the blood will take time and patience, as they involve experiments of a most delicate nature. Since there are always sources of error in quantitatively determining soluble gases when experimenting in the open air, the method indicated above would lead, I think, to closer figures than those which we have been accustomed to accept.

It should be remarked that in all examinations which refer to the two absorption bands located between the sodium line D on the borders of the orange and the yellow, and the hydrogen line E in the green, we cannot tell whether the blood be from man or some other vertebrate animal. Certain it is, however, that two specimens may give shades of differences; but these effects probably arise from the continued exposure of the retina to the spectrum colors. After watching for hours through an intense light phantom bands will sometimes appear and fade away. This occurs from the fact, no doubt, that the genuine bands are for the most part dark, and are complimentary to white light; or, that the eye is sympathetic to impressions made upon it for a long time even when closed. There is still another method of observing which cannot be relied upon, and which I beg to call attention to in the following example:

After one of Dr. Mason's lectures, the blood from a dog and a rabbit were taken. One of these animals was poisoned by woorara and the other by strychnia. With a desire, and I may add longing to detect if possible a difference in their bands either in width, intensity, or some other variation, I attached the cells to a slide and brought one and then the other into the field of view. They did not appear alike. But this was only an illusion, as next day when the eyes were rested and a double spectrum used their bands coincided in every particular. I am not aware that

notice has been directed to these points by others, and give them merely as my own experience and for what they are worth. But while these bands are persistent in very weak solutions, even as 1 to 7,000 they may be plainly seen in the mesentery of the living animal, or in the web of the frog's foot. Acting upon this latter hint, I endeavored to get the same from some part of the circulation and thus study the oxyhaemoglobin portion of the blood in the arteries of the human body. For this purpose I used a large bi-convex lens, and brought the direct sunlight to a focus on the instrument—or rather a little out of focus so as not to burn the hand.

The thumb and first finger were then extended apart as far as possible, and the web of the obtuse angle, which held to the light is seen to be translucent, brought into the cone of light close to the slit. By taking these precautions, I have been able to study the absorption bands of the arterial blood in the hand for hours. If the hand, as above directed, be held firmly to the slit, and the radial artery be pressed by the other hand, or by an assistant, they fade a little but on releasing the pressure they again resume their natural width and shade. Carbonic acid or hydrogen inhaled has also about the same effect. When the wrist is tightly ligated for a few minutes they almost entirely disappear; but on cutting the ligature are quickly restored. In a small recitation room in which a hundred pupils had been assembled they were changed in a marked degree, but as soon as the assistant let in upon me the air through the open windows, they brightened up in a few inspirations.

The skin at the sub-acute angle of two adjacent fingers may also be used with the same results; but the wide and wedge-like space between the thumb and first finger is to be preferred mostly from convenience. This furnishes an easy way to study the red corpuscular condition of individuals of different temperaments, and in different states of health. It only remains to map the spectra as a guide to go by, and deduce from actual experiment the absorption bands of blood diseases in fevers, &c. And this

can be done by the method I have indicated without drawing a drop of blood from the patient. As I have said before this idea of using transmitted light from the human body in examinations with the spectroscope, was suggested by the common experiment which all are so familiar with in studying the circulation in the frog's foot. I am aware, however, that Herr Verordt, a German physiologist, published last summer the fact that these bands may be seen by *reflected* light—that is to say by holding two fingers together and admitting the light between their two surfaces. I have repeated his experiments with reflected light not only from the fingers but from other surfaces of the body.

They do not give, however, the satisfactory results which *transmitted* light from the blood vessels affords, and which, so far as I know, is here for the first time described to the profession.

ON THE USE OF PERMANGANATE OF POTASSA IN CHRONIC OTORRHŒA.*

BY LUCIEN HOWE, M. D.

So many different substances have been recommended for chronic otitis media purulenta, that it would seem unnecessary to add to the number. The one to which I would call attention, however, is so frequently employed for similar purposes in other portions of the body, that there would seem to be nothing new in its application to the ear. It has been incidentally referred to in this connection by one or two, but I am not aware that Von Troltsch, Gruber, Roosa, or any other writers, consider it worthy of mention. It would be strange, however, if among the numerous astringents or caustics used for this purpose, so reliable an agent as the permanganate of potassa, had not already been thoroughly and systematically tried.

* The greater part of this paper was presented at the last meeting of the American Otological Society.

I simply propose, therefore, to cite a few cases in which it was used, and compare the result with that obtained in the employment of other agents.

For this purpose I have collected from my case book the records of 53 individuals thus treated. Several others were noted, which would have been included in the list, but for the fact that the records were not complete, or that the patients were lost sight of before any definite conclusions could be arrived at.

The ages of the patients ranged from two to forty-four years, and the disease had lasted, with greater or less variation, from three weeks to twenty-two years. In several instances where the otorrhœa followed a primary acute otitis media purulenta, it was not easy to say when the discharge had passed into a condition to deserve the term "chronic." I have, therefore, excluded all cases in which the disease has not lasted at least three weeks, or which have still presented those symptoms of pain, etc., which would entitle them to the term "acute."

Concerning the etiology of these cases, there was about the same variety that one would expect in a series chosen at random. Scarletina furnished its usually large quota of almost half—more exactly twenty-one. Seven followed primary acute otorrhœa. Two resulted from measles, and a number were dependent upon causes which it was impossible to ascertain.

The principal treatment prescribed in all of these, was the use of a solution of permanganate of potassa in water. In the milder cases two grains to the ounce was found to be sufficient, but if more severe, or of very long duration, the strength was increased to four, six, or even eight grains to the ounce.

The patient was simply instructed to syringe out any accumulated secretion with tepid water, and then pour a few drops of the fluid into the ear. This was allowed to remain five or ten minutes if it produced no smarting or burning sensation. If decided inconvenience followed, however, it was washed out sooner. When the discharge was at all abundant, this was repeated twice daily, and if very profuse, of course the ear was kept clean

by more frequent washings with water alone. Whenever polypi developed, as was the case in three instances, or any other complications presented, they were treated by the usual methods.

A sufficient time has now elapsed to count with considerable certainty on the effects produced; and as a result, I find :—of the 53 cases 40 have entirely recovered in an average time of 38 days. In six the discharge recurs at intervals; in four it is continual, but lessened, as to quantity and the fetid character of the odor; in three, it still persists.

Now comparing this treatment with those methods usually placed foremost in the text books, I find the results are decidedly in its favor. In seven of these cases, nitrate of silver had been used after the manner recommended by Schwartz, and although an improvement was manifest in most of them, the progress was not as rapid as under the use of permanganate of potassa. Moreover, in ten other cases treated with nitrate of silver the discharge was arrested in six, after an average of 51 days; two persisted in the treatment about six months and then disappeared; while concerning two, the record is imperfect. In three of the cases reported, I began by using sulphate of copper, but after an average of six days changed to the permanganate of potassa, and improvement followed quite as rapidly, to say the least, as before. Again, in five other cases treated with sulphate of copper alone, I find, on the average, the discharge continued for 63 days. Sulphate of zinc, alum and tannic acid, alcohol, carbolic acid and other remedies have also been used in occasional instances, but the record concerning them is not sufficiently definite to warrant any exact statement. There are obvious objections against drawing any very positive conclusions from the data here given, to which it is only fair to direct attention. The principal one is, that the number of cases reported is quite limited. Again, it is probable that many cases of otitis media purulenta will yield to the use of almost any astringent, or of water alone, if persistent effort is continued. In spite of these objections, however, the facts just cited indicate that in the perman-

ganate of potassa we have a remedy quite as efficacious, if not more so, than those upon which reliance is usually placed. It has in addition certain advantages which would appear to make it preferable to most other applications. Unlike the strong solutions of nitrate of silver, it can easily be used by the patient, and is not followed by as much smarting or pain. Especially is it to be preferred for the antiseptic or deodorizing quality by which the fetid smell of the secretion is removed to an extent not observed in the use of any other application, not excepting carbolic or salicylic acids. In general, therefore, it seems to be a remedy for this disease, which can be counted on to heal safely, quickly and easily.

NEWGROWTH IN THE BLADDER OF A CHILD.*

BY HERMAN MYNTER, M. D.

ALLOW me, gentlemen, to present a singular case of newgrowth in the bladder, and to add to my report some remarks concerning this disease.

The patient, a little girl sixteen months of age, daughter of a clergyman in a neighboring village, is a strong, healthy child, well developed and well nourished. For about one year she has urinated very frequently, and, every time, she strained, screamed and kicked with all her might, for a short time after the urine had passed. Four weeks ago the mother discovered a little red, bleeding tumor passing out of the vagina during the straining. She brought the child to me the 11th of June of this year. On account of the violent resistance of the child, chloroform was necessary, having administered which, I examined the parts, Dr. Howe being present. Nothing was seen except a slight œdematous swelling of the hymen, but suddenly the child passed water, and, thereafter, strained with much force. Immediately a red,

* Read before the Buffalo Medical Association, July 1, 1879.

lobular, bleeding, pedunculated tumor, as large as a nut was pressed out through the hymen. I immediately applied a ligature around the base of this tumor, but this produced increased straining, and several smaller growths appeared on all sides of the larger one. Believing I had here a polypous newgrowth of the vagina, and as the larger tumor obstructed the view of the parts, I desisted, for the moment, from further examination. Three days afterward I again gave the child chloroform, Drs. Lothrop and Barker being present, and found that the ligated tumor had fallen off. A small speculum was then introduced into the vagina, and a little above the hymen, on the posterior vaginal wall, was found the rest of the severed pedicle in the form of a little granulating prominence. No trace was discovered of the other tumors, and I therefore believed that, without knowing it, I might have gotten the ligature around them too. The removal of the large tumor having had no effect whatever on the pain and frequency of urinating, I therefore introduced a sound into the bladder, and both Dr. Lothrop and myself noticed a click, as though the sound had touched a stone. Two days afterward I attempted to remove the stone, Drs. Tobie, Hopkins, Folwell, Cary and Barnes, being present. The child was again put under the influence of chloroform, but, having introduced the sound, I could not now get the click. At last I felt it distinctly; Dr. Tobie also felt it, and Dr. Cary, too, although the latter gentleman did not feel perfectly satisfied. He had felt something, but he thought there was some substance between the stone and the instrument. I gradually dilated the urethra with Gouley's instrument for dilating strictures, and at last introduced the forceps, but no stone could be found. I got something in the forceps every time, but it was adherent, and was not hard enough. I introduced my finger gradually, to explore the bladder, but could detect no stone. Believing the fragment to be so small as to escape detection, I syringed the bladder out with lukewarm water. The child immediately commenced to strain, and pressed out through the urethra a polypous mass as large as the egg of a pigeon, consisting of hundreds of small pedunculated tumors,

the largest of which was the size of a bean, of an oval shape, hard as cartilage; and the smallest globular in form, as large as the head of a pin, and seemingly springing up from the mucous membrane everywhere. The tumors were of a pale color, and had a very deficient vascular supply. I took hold of a large part of this mass with the forceps, and gently tore it off, by turning the forceps; several others I cut off with the scissors. Very little bleeding occurred, but there seemed to be no end to the growths. The whole, considered as one tumor, had a broad base, consisting of the mucous membrane of the bladder, and it seemed to us that the whole interior surface of the bladder was involved in this singular newgrowth. The more we pulled the more came out; and, believing in this case discretion to be the better part of valor, I therefore, the other physicians concurring, reduced the tumor and cleaned the cavity of the bladder. The following days the child felt better, had no fever, and, as the water passed involuntarily, on account of the dilatation of the urethra, there was no straining and less pain than before the operation. Dr. Hopkins, who made a microscopical examination of the tumor, reports that it consisted of connective and fibrous tissue with very few cells, and was covered with normal epithelium. The newgrowth, therefore, must be considered as a fibrous tumor, or rather, as a collection of fibrous tumors.

This, gentlemen, is then a case of a polypus in the vagina in a little girl sixteen months old; and, what is worse, a newgrowth in the bladder, the growth, in all probability being a fibromatous polypus, benign in its character, but malignant by virtue of its position and the derangement to the functions of the urinary organs. Tumors in the bladder, according to Bilroth and Pitha, are found oftener in women than in men, are generally only found in old age, but may, exceptionally, be found in children. One case is mentioned in Bilroth and Pitha's surgery, being that of a female child under four years of age. They may be found anywhere in the bladder, but the places of preference are collum vesicæ and trigonum vesicæ. The tumors are generally cancers or sarcomas, but we sometimes find mucous polypi, cysts,

fibrous tumors, and other forms. The newgrowths are partly primary, having started in the wall of the bladder (and these tumors are generally benign in their character, although cancers may take their starting point here), partly secondary, attacking the bladder from the neighboring organs.

In regard to symptoms, newgrowths, if they are small and not located in the neck of the bladder, often do not manifest themselves; if they are large, they may give origin to violent symptoms, as ischuria, dysuria, hydronephrosis, severe bleedings, cystitis, etc., etc. If incrustations occur, it may have every appearance of being a stone, as in the case above reported.

In regard to the diagnosis, I have very little to offer. It is evident that the diagnosis may be very difficult. In this case, where the tumor presented itself at last, it was very easy but until then we had no thought of a newgrowth here. That the tumor may simulate a stone is evident. It was our luck, in this case, that the patient was a little girl; for had it been a boy, I should probably, being so sure of having a stone, have made lithotomy. As it was, there was scarcely any operation, the child herself having dilated the urethra very much by continued straining and attempts to discharge the polypus.

Also in regard to prognosis, little can be said. It is evident that the most severe complications may arise, and that on the other side, a little polypus may be harmless if it has its position in the fundus of the bladder; but even if the tumors be of benign character, the prognosis is generally unfavorable, as it is very difficult to remove them.

The treatment is operative, but the operation is so difficult, and the chances of success so few that some surgeons advise not to touch them.

If we have a pedunculated tumor situated at the neck of the bladder in a female, we may try to tear it off, ligate it, cut it off, or crush it with instruments of various forms. The danger lies in the bleeding, and in the possible perforation of the bladder. It will be necessary in the majority of cases, first to dilate the

urethra forcibly, which is easily done in case the patient is a female—in males, the operation must, necessarily, be more dangerous. Another way is to open the bladder, either through *sectio alta* above the symphysis, or by vestibular incision, or by vaginal incision (*kolpo-cystotomy*).

Liston removed a large cyst by *sectio alta*; Nusbaum more than once removed pieces of the wall of the bladder as large as a dollar, by operation for cancer of the rectum, and not even a fistula remained. But what is there to be done in a case like this, where the patient is sixteen months old, and the newgrowth is not pedunculated, but consists of a great many small tumors springing up from the mucous membrane? To remove the whole of the diseased membrane at once would scarcely be possible without injuring the bladder so much that death would be almost certain. To try, little by little, to cut off the tumors as they present themselves when the child strains seems almost a hopeless task, considering the great number of tumors of different sizes that we saw. To leave the child to its sufferings, which judging from its screams, must be considerable, seems cruel. What is then to be done? Considering that the child feels better when the urine passes involuntarily, would it not be advisable, if it shows itself to be impossible to remove the growths, gradually, to establish a vesico-vaginal fistula? I would suggest that as a means of relieving the child.

In the *Philadelphia Medical Times*, of July 5th, Dr. Lenox Hodge has an article on *kolpo-cystotomia*, which he recommends for irritable bladder or chronic cystitis. In chronic cystitis, the operation should be performed in order to give relief to the pain and straining, to prevent retention of urine, and to allow the bladder rest. The object is to leave an opening for a year or more through which the urine may flow instead of flowing along the urethra.

When the cause of the cystitis can be found and removed, as in retroflexion of the uterus, no one would think of performing this operation. But when the cause cannot be found, or if found,

cannot be removed, or if, when removed, the pain and inflammatory symptoms continue, he thinks kolpo-cystotomy is indicated. Dr. Hodge mentions two cases, in the first of which the result, although not perfect, was favorable, in so far that the patient, who had been obliged to urinate with great pain from twenty to twenty-five times every night, was able after the operation, to remain in bed all night, and her pains were greatly diminished. No diagnosis is given.

The diagnosis of the second case is still less clear. In neither case did the pain disappear entirely, which Dr. Hodge considers as a proof that the pain was reflectory and not solely due to the urine in the bladder, although the sensations of the patients seemed to indicate this. He therefore points out the importance of finding and removing the cause of reflex pain before resorting to kolpo-cystotomy. Secondly he mentions that all the urine did not escape involuntarily, but that, even after the operation, considerable straining was necessary. The cause of this was, in his opinion, that the presence of urine in the vagina produces spasmodic contraction and closure of the orifice of the vagina, and the only power of expulsion is in the abdominal muscles and diaphragm acting at a great distance and under a disadvantage. He therefore concludes that we must not expect to relieve all the pain, nor that the urine will pass out without any effort—facts which are of importance for the physician who contemplates such an operation.

TRANSLATIONS.

“IS THE CONTINUED USE OF A SMALL QUANTITY
OF SALICYLIC ACID DETRIMENTAL TO HEALTH?”

TRANSLATED BY E. V. STODDARD, M. D.

In the annual report upon the development of chemical technology, by Rudolph V. Wagner for 1877, p. 451 of the Commercial Report of Gehe, upon the rates of salicylic acid, occurs a note,

which runs as follows: "There appears, besides the profit" (in the preservation of Beer by salicylic acid) "not only on the part of the brewer and seller, but also, on the part of the public, that a small quantity of salicylic acid is less injurious to the human organism than the changed products resulting from the acid fermentation of beer, which in common parlance is called 'stich.'" Upon this the editor of the report makes the following observations: "Few of our readers could agree with this opinion. Recent experiences in our own clinic make it decidedly doubtful that salicylic acid could remain indifferent to the compounds of an organism so different from itself."

I give briefly, for evident reasons, my opinion and my own experience on the question, as to whether the continued use of small doses of salicylic acid has any injurious effect upon the health. The clinics, which certainly afford increasing facilities for observation, show that salicylic acid, given to patients in large doses, produces ringing in the ears and other uncomfortable conditions, and also suggests the idea that the continued use of small doses of salicylic acid *may* have the power of producing injurious effects upon the health. This is one of the questions upon which experiment only can justly decide. Such a one have I made upon myself. Since Sept. 5th, I have been daily drinking a watery solution of salicylic acid, containing one gramme (15 gr.) of salicylic acid to one litre (one pint) of water. At first I prepared this solution only; later, I put the same amount in an artificial mineral water, impregnated with carbonic acid; a salicyl-carbonic acid water was the result, which contained one gramme (15 gr.) of salicylic acid to a half litre ($\frac{1}{2}$ pint) of water, and which was taken diluted with an equal quantity of water. The carbonic acid concealed the taste of the salicylic acid completely of this 1-10 per cent. solution, I daily drink from three-fourths to one litre. I have in this manner, since September, consumed over 200 grammes ($6\frac{1}{4}$ oz.) of salicylic acid. Besides, all the beer and nearly all the wine I have drank during two years past have been salicylized. The excellent draught beer

from the Leipsic Brewery, I have regularly drawn from the cask with twenty grammes (300 grains) of salicylic acid to each hektolitre (10 pints) and with wine also ten grammes (150 grains) of salicylic acid to the hektolitre (10 pints).

In this way I have, with water, wine and beer for nine months daily taken at least one gramme (15 grains) of salicylic acid. My health is excellent, I feel better and more vigorous, and am free from the pain which led me to the trial of the salicylic acid as a means of cure. Formerly with the slightest indiscretion in diet, pain in the stomach occurred, and following it, soreness of the mouth and tongue, which frequently rendered speaking painful. During the three-fourths of a year in which I have used the solution of salicylic acid, I have had no recurrence of pain, even after marked errors of diet. The use of salicylic acid has become indispensable to me. It seems from this, to be the same as with spirituous drinks. But few can take half a bottle of rum, while there are but few who do not presume to take a bottle of wine or beer without injury to their health. Hence it may be remarked for the comfort of the habitual beer drinker that he who daily consumes five litres of beer, and, therewith, by an estimate, of 2-10 per cent. solution of salicylic acid, about one gramme of the salicylic acid, in reality perhaps gets the benefit of only the third part of it, while, on the contrary, the full amount of the phosphate of potassa added, would remain in the beer. It is to be remarked that in the use of larger doses of salicylic acid, which would be prescribed in articular rheumatism, the urine contains albumen. My physician, Dr. Bahrdt, of Leipsic, wished to ascertain whether, in the daily use of one gramme (15 grains) of salicylic acid, albumen would be excreted, and, accordingly desired me to examine my urine from time to time. It is always clear, and contains a small quantity of salicylic acid, as may be recognized by the use of the chloride of iron.* Upon

* NOTE. It may be remarked here that the small renal calculi, which previously were often, and not without difficulty, passed off with the urine, during the nine months in which I have regularly drank the solution of salicylic acid have ceased to appear, and accordingly the Carlsbad Course, previously ordered for me by my physician has become unnecessary.

the addition of a few drops of chloride of iron there always appears at once a white precipitate of phosphate of the oxide of iron, more chloride of iron produces the well known blue color. —From the "*Journal für Practische Chemie*," from an article by Prof. H. Kolbe of Leipsic.

Berlin, May 28, 1879.

SELECTIONS.

CHOLERA INFANTUM.

REMARKS, WITH NOTES OF CASES BY PRESTON B. SCOTT, M. D.

AT the last meeting I could only make a brief reference to the treatment of cholera infantum. I regret a longer time is not allowed me, in this season of unusual opportunities, for more extended observations of the course and management of this disorder. Short as it is, enough has been seen to verify the statements made, enough in a week to strengthen confidence, and the conviction that it is, though an annual Herod among our innocents, yet one of the most preventable and curable of our acute infantile disorders. There is certainly too much general apathy to this annual decimation of the nurslings of the nation. There is individual submissiveness, rather to be deplored, in the common acceptation that this affection is of the inevitably destructive form, and that "after all the blessed child is better off." Cholera infantum is, theorize as you will as to pathology, really a disease of season. Like unto sunstroke in adults, it must be guarded against for a brief time only. In some cases the attacks will surprise a most vigilant sentinel. Generally there is admonitory diarrhœa. Because milk is the proper food of all childhood, there is no reason why this staff of infant life may not be laid aside for a few days of digestive rest. One gushing serous stool will exhaust more than a dozen bottles of milk will restore. Whence comes this gushing flow of the life blood of the child?

The milk which before has been finely curdled, now lies there an oppressive mass, or passes in putrefactive ferment into the bowels. There is the undue heat belonging to this process. The lacteal absorbents receive no proper chyle for the lymph channels. The laws of Dutrochet have changed their balance, and in exosmosis there is the rapid serous waste. The liver and all the intestinal glands are in a state of temporary derangement.

In most of the cases, if the patient can gain a few hours of rest you will command the situation, reorganize the scattered forces, and regulate the secretions. What is his work? In many cases he has the history and phenomena of sunstroke before him—cold to the head, cold and grateful drinks to the stomach; a tepid or cool pack to the body, impressing the nervous system through the sentient nerves of these surfaces. He must at once oppose instinct by separating mother and child for a time. The solution of albumen and gelatine on crushed ice will answer the cravings of thirst and hunger. They do not ferment, they favor the prompt resumption of endosmosis. While in the cases I have noted calomel was the chief medicinal reliance, whiskey, camphor and ether fulfill most of the indications of extreme cases. Opium is too often found to have been placed in the way. The handy laudanum or paregoric vial has already been drawn upon. Here I will only impress two points of familiar notice. The very medicine which is the least indicated and the most capable of harm, is the first resorted to. The food which the disturbing forces have converted into conditions most favorable for their action is stubbornly persisted in, and as obstinately returned also. Opium, hurtful to the child inversely with age, is used by popular hand, with a confidence which, with the profession would be counted sheer recklessness. Milk, the very food on which this ferment is feeding, is given under the eye which sees each portion of it vomited and purged, as often as it is taken. It is a familiar saying, in the story of the case, that as often as it takes the breast or the bottle, it vomits. It is equally familiar to the doctor that it does *not* when it quits the bottle and the breast, and uses only

crushed ice and egg water. In the most favorable recovery the return of digestive power of the child is not promptly equal to the ordinary diet.

The common error is in the too early return to this. It is a good rule to suspend altogether cow's milk, and to restrain nursing to longer intervals and smaller quantities, so long as the disorder lasts, and the green curdled masses appear in the stools. It is better not to resume the milk while there is fever, thirst, high-colored urine, sour, green, thin actions. There is nourishment, safety, and generally acceptability in the range of barley water, whey, albumen, gelatine, *panado*, and delicate animal broths. The following cases constitute what I have seen of this affection this season. I have only one other of severe bowel disease, and this, a case of colo-enteritis, is now running an unfavorable course.

Case I. Age four months; milk fed. In good health, digestion and bowels natural until the morning of June 13. Seized 11 A. M. by vomiting and profuse rice-water purging. At 1 o'clock P. M., waste and exhaustion had been rapid, eyes and fontanelles sunken; extremities cold; body hot; thirst and restlessness intense; pulse 150; temperature 104°. Gave a teaspoonful of brandy in iced egg water, and at once wrapped the child in the cradle sheet wet with tepid water and applied ice-cold cloths to the head. In ten minutes the child was quietly sleeping in the pack. Twenty minutes afterwards the temperature was taken and a reduction of two degrees had taken place. The wet sheet was removed and an eighth of a grain of calomel was placed on the tongue, and iced egg water given. Two hours of quiet sleep then followed. Calomel was again given and repeated at bed-time. There was no return of vomiting and one loose action from the bowels occurred in the night. The next morning the temperature was normal, the thirst gone and the child revived. One action, dark and of more natural odor, took place in the afternoon. Egg and rice water only were allowed. On the second day cream was given in rice water. Since then

the child has fed on racahout, and has had no trouble with the bowels, and has gradually regained its flesh and strength.

Case II. June 15th; six months old; fed cow's milk; for several days has had loose bowels and occasional vomiting of milk. 5 P. M., had been vomiting and purging all day; pulse 150; temperature $103\frac{1}{2}$ Fahr.; intense thirst; exhausted and restless. At once placed it in tepid pack and applied cold to the head. Gave egg-water on crushed ice. Up to my visit it was allowed the bottle of milk, and at every taking it vomited and purged. In the pack the child became quiet, and rested for half an hour. The temperature came down three-fourths of a degree at 10 P. M. I saw it again. It had taken two doses of one-tenth of a grain of calomel; had not vomited or purged, and had not been so thirsty. It was pretty quiet until 8 P. M. when, growing restless, it was again placed in the wet sheet, and allowed to remain in it half an hour. I found it in a tranquil sleep; pulse 110, and temperature $100\frac{1}{2}$ Fahr. On the morning of the 16th I found it had passed a quiet night, had not vomited, had had one loose, dark stool. Two doses of calomel had been given, egg-water and gelatine were ordered. I saw it on the 17th and learned it had rested well; had a dark pasty stool. I then placed it on Gerber's food and discharged the case.

Case III. June 16; thirteen months old; had six incisors; is nursed and fed. This child was seized with vomiting and purging; stools thin, green, sour smelling, and profuse. Rapid exhaustion coming on, it was not allowed to nurse, and ordered to have egg-water and one-twelfth of a grain of calomel every hour. On the second day dry cracker and panado were allowed. Carbolyzed camphor water was used to correct tendency to fermentation. On the third day the child was permitted to nurse morning and night. On the fourth day it was dismissed.

Case IV. Nine months old; nursing. Had been purging and vomiting for four hours before my visit at 9 P. M. The child nursed and vomited by rapid turns, followed at short intervals by rice-water stools. The eyes were sunken; extremities

cold; thirst insatiable; temperature 102° . Ordered to be taken from the breast and to have iced egg-water *ad lib*. Calomel in 1-16 grain doses every half hour. The vomiting ceased in less than an hour. The intervals between stools grew longer, and the actions, though thin, smaller in quantity. The egg-water was exclusive diet and drink for two days. On the second day the actions were dark and pasty. On the third day the child was allowed to nurse, and is now quite well.

Case V. Age twelve months; at the breast. I saw it at 4 P. M., June 14. Nursing and vomiting and purging from 9 A. M. to the time of my visit. Intense thirst and restlessness; extreme exhaustion; profuse rice-water actions; pulse 150; temperature 99° . I at once had the child taken from the breast, and ordered 1-12 of a grain of calomel every half hour, and egg-water *ad lib*. At 11 P. M. had not vomited; two small, thin actions; less thirst and some sleep. 15th, had passed a good night; was still thirsty, and clamorous for the breast. During the day took carbolized camphor and cinnamon-water and egg-water. In the afternoon had two small, dark, thin actions. 16th, had a natural alvine action. Recovery was now completed, and the case dismissed.

Case VI. Two years old. At the breast. June 18th and 19th. A parallel case in onset, course, and treatment and result, with case 5.

Case VII. June 12th. Twelve months old; fed on cow's milk by day, and condensed milk at night. Vomiting and purging every few minutes. Treated with egg-water and one-twelfth grain dose of calomel every half hour. Twice in the convalescence of this child it was allowed to take condensed milk, with recurrence once of vomiting and diarrhœa, and once of diarrhœa alone, which was relieved by carbolized camphor and cinnamon-water.

Case VIII. June 13th. Five months old; fed on cow's milk; is hearty and vigorous; had sour milk on the 10th and 11th; early in the morning vomiting and purging came on. Thin,

curdled milk actions five or six times. 11th and 12th, had occasional vomiting of milk. 13th, vomiting, rice-water purging. Seen 4 P. M. in state of great exhaustion. Treated by small doses of calomel, and the egg and rice-water, with favorable progress until the third day, when it was fed on condensed milk against my instructions. Actions previously small and at long intervals, became frequent, large and sour smelling. Relieved by carbolized camphor mixture, and put on Gerber's food on the sixth day, and has since done well.

Case IX. June 16th. Two years old; in good health, and on general food. Took milk for supper, and ate some berries. Severe vomiting and purging at midnight, and exhausted by three immense watery, offensive actions. Treated with calomel in one-eighth grain doses, iced egg-water and a mixture of carbolic acid, comp. spirits ether and camphor-water. The subsequent diet was rice-water drink, broth of chicken and dry crackers.

Case X. (Mother had lost three preceding children with cholera infantum under ten months. One nursed and the other two were fed with cow's milk to hour of death.) Ten month's old; fed on cow's milk; for two days had loose, curdy, offensive actions. Awoke June 22d, vomiting and serous purging; gave one-tenth grain doses calomel every half-hour, cinnamon, camphor, and carbolic acid water. Dismissed on third day with returning healthy stools. Kept on egg-water for two days, and on third day allowed crackers and chicken soup.—*The Medical Home, Louisville, July, 1879.*

CASE OF ŒSOPHAGOTOMY.

DR. ATHERTON, in the *Boston Medical and Surgical Journal*, reports a successful operation of œsophagotomea externa for a foreign body.

The patient was an old lady, 70 years of age, who at noon, August 28, 1877, while eating some lamb, swallowed a piece of

bone, which stuck in her throat and caused a good deal of choking. She succeeded by external manipulations in working the foreign body down as far as the lower part of the neck. As all trials of either withdrawing the same or pushing it down into the stomach failed, and as the sufferings were severe, œsophagotomy was advised, and performed next day.

Operation: Chloroform was given for a few minutes, till she was partially anæsthetized, and then ether was substituted. An incision three or four inches long was made on the left side of the neck, at the inner side of the sterno-mastoid, but not quite so obliquely as that muscle runs. The anterior jugular vein lay so much in the way that it was divided, and bleeding from it controlled by torsion. After getting through the superficial fascia and platysma muscle, there came into view the anterior belly of the omo-hyoid, which with the sterno-mastoid and carotid vessels was drawn to outer side. By use of director and handle of knife the posterior part of the trachea was reached. Now a sponge probang was passed through the mouth into the œsophagus, till it brought up against the obstruction. The sponge could be felt somewhat indistinctly at the bottom of the wound, and, after considerable searching, just below it and at the lower end of the incision, was discovered a hard body, with a rather sharp outline. A slight touch of the knife brought into view the upper end of a piece of bone, which was seized by forceps and extracted. It proved to be a portion of lamb's rib, having obliquely cut ends, and measuring rather more than one and one-half inches from tip to tip. It lay nearly straight up and down in the œsophagus, but its rough, jagged ends, prevented its being readily dislodged. I omitted to mention that upon coming down upon the deep tissues I found them swollen, and the parts about the œsophagus infiltrated with what appeared to be sero-purulent matter. Also some bubbles of gas escaped before I cut into the œsophagus. The wound was sopped with carbolic acid and water, one to eight. Also three stitches were put in the upper part of the incision. The rest was left open. Carbolyzed oil dressing. The first three days the patient was nourished with enemata, but

after that time by injection of milk, broth, egg-nog and brandy through a tube, introduced into the stomach. Some sloughing of the wound occurred, but, on the whole, the case progressed favorably, and the introduction of the tube was omitted on the 22d of September. October 2d wound entirely healed. The author would in another case not allow nourishment to be taken as soon by the mouth, believing that the wound was made unhealthy by its contact as it escaped externally.

CARBOLIC ACID INJECTIONS FOR THE CURE OF INTERNAL PILES.

IN a discussion in the surgical section of the American Medical Association (May 7), Drs. Z. R. Weist, J. W. Murphy, W. H. Brown, and A. B. Cook testified to the safety and efficiency of this method for the cure of internal piles. The acid is injected into the substance of the tumor, either pure or diluted with glycerine or alcohol. It will be remembered that Dr. Andrews, of Chicago, is endeavoring to collect statistics on this subject, in order to determine the safety of the acid treatment compared with the older methods, viz., the ligature, the clamp, and the cautery. Until recently the carbolic acid treatment was resorted to by advertising quacks, who sold it as a secret remedy.—*The Medical Herald, Louisville.*

THE SPHYGMOGRAPH FOR DIAGNOSIS, PECULI- ARLY SLOW PULSE.

(*Proceedings Baltimore Academy of Medicine.*)

DR. C. JOHNSTON, exhibited some beautiful sphygmographic tracings, showing the value of this new instrument in diagnosis; one case was of special interest. A lady patient had a pulse of

33 to the minute, which had attracted his attention from its peculiar slowness. From time to time he had tested the pulse with the utmost care, but could never get more than the 33 beats. The sphygmographic tracing exhibited a very slight elevation in the middle of each trace division, in evidence that a feeble heart-pulse did occur with every alternate strong beat, too feeble for the fingers to detect, and yet clearly defined by the sphygmographic tracings.

Under a tonic treatment, the lady improved much, and, in course of a month, the pulse of 33 to the minute had developed into 66 equal pulsations. The sphygmograph now gave the 66 equally strong wave impulses to the minute. The pulse had always been 66—the alternate beats, however, having been too feeble to be recognized, thus giving the explanation of the very slow pulse.—*The Virginia Medical Monthly, July, 1879.*

THE MEDICAL EXPERT SYSTEM IN GERMANY.

IN Germany alone has medical jurisprudence received a proper estimate of its worth. It was introduced into the German Universities at their foundation, and made a part of medical education. The expert is made a government officer, holding his position because of his peculiar skill and fitness. The present organization is the result of continuous legislation upon the subject since the early part of the sixteenth century. It consists entirely of medico-legal officials, and is divided into four divisions. The county physician and county surgeon constitute the first, the county tribunal.

They are required by law to be thoroughly educated in medicine, surgery and obstetrics, and to have special training in medical jurisprudence. This training is certified to by examination before a supreme medical commission. The duties of the county tribunal are twofold. It is incumbent on them to inves-

tigate all medico-legal questions referred to them by the courts. They also perform the duties which in this country are performed by the coroner. Their appointment is continuous and they owe it to neither party, but to the State. They make personal investigation of the facts in every case. Power is given them to take testimony. They may call experts as counsel if they wish, but these experts must have certificates, received from State examinations, of their skill in the specialty whose principles it is desired to apply. The facts and proofs and the conclusions arrived at by the expert tribunal, are then shaped into a written report, which is carefully preserved, along with the report of the subsequent proceedings, and so far as the court making the reference is concerned, this report is conclusive, but the physician and surgeon may disagree, or the parties interested may be dissatisfied. To meet these cases, an appeal is made to the second division of this organization. This division consists of a medical commission of from four to six members, and is somewhat analagous to our district courts. One such commission exists in every province. If dissatisfaction exists with the decision of this tribunal, an appeal lies to the third division. This is the supreme medical commission, comprising men of national reputation. In the fourth division we find the Minister of medical and sanitary affairs, who presides over the entire department of State medicine.—*Pacific Medical and Surgical Journal*.

RETENTION OF THE URINE.

THIRTY-FIVE PUNCTURES OF THE BLADDER—RECOVERY.

IN the *Revue Medicale de Toulouse*, Dr. Dazet reports a case of treatment for the *retention of urine*, by puncture with the *aspirateur* (exhauster.)

This method of operation, lately introduced into practice, although not so *painless* as in the case cited by our associate, is of

very great service. In case of periprostatic congestion, a transient inflammation creates an insurmountable obstacle, one or more punctures corrects the disorder, and the retention ceases without operation upon the canal.

In this case the subject was a man, fifty years of age, attacked with *retention of the urine* succeeding hemorrhoidal congestion.

It being impossible to use the catheter, an opening was made with needle No. 2 of the *aspirateur*. There was a discharge of about four and one-half pints of urine. The next morning a second puncture was made; and, the following evening, a third. From the 27th of July to the 12th of August, this practice was adhered to, morning and evening. Thus there were thirty-five punctures in a space limited to two or three centimetres above the pubis.

The discharge by the urethra commenced after the third puncture, and it was only after the thirty-fifth, that the patient habitually voided the urine in a natural manner. Then he recovered without difficulty.

This result is of great interest in those not rare cases in which it is very difficult, perhaps impossible, to draw off the urine with the usual appliances.—*Journal de Médecine et de Chirurgie Practiques*.

SALICYLIC ACID AGAINST TÆNIA.

AFTER trying almost all other remedies in vain, Maryrowski administered to a lady who had suffered with *Tænia Solium* for nine years, 8 grains of salicylic acid four times, at intervals of one hour, and then gave a tablespoonful of castor oil. The treatment proved painless and perfectly successful.

SOLVENTS OF IODOFORM.

Dr. Vulpius, of Heidelberg, points out that the usual statements regarding the solubility of Iodoform in alcohol and ether

are incorrect. He speaks of collodion as one of the most useful solvents—one part of Iodoform, previously shaken up with a little ether is readily soluble in nine parts of collodion. This will be found a convenient method of applying it in many cases.

WHOOPIING COUGH.

A novel method of treating these cases is given in the *St. Louis Medical Journal*. He charges a steam atomizer with the following mixture :

℞	Ext. Belladonnæ Fluid,	-	-	-	gtt vi to xii
	Ammonii Bromidi,	-	-	-	℥i
	Potass Bromidi,	-	-	-	℥ii
	Aq: Destillat,	-	-	-	℥ii
	Misce.				

The atomizer being placed on a table before the patient, the spray is rapidly carried over into the face, mouth and lungs of the child, and continued 10 or 15 minutes till the pupils are dilated by the effect of the Belladonna mixture. The application is to be made morning, noon and at bed-time. This has so far cut short the spasmodic cough within two or three days, uniformly and almost to a certainty.

TO GET LEECHES TO FASTEN.

Almost every physician has at times experienced the difficulty of getting these animals to bite. The following plan is commended, and will be found effectual in all cases when the leeches are healthy. Put the animals in a small glass vessel half filled with cold water. The part of the body which is to receive them is carefully washed with warm water, and the glass is quickly inverted upon the skin. The leeches attach themselves with surprising rapidity. When all the animals have bitten the glass is carefully removed, the water escaping being absorbed by a sponge. If a single leech is to be applied, the same plan is adopted, using a test tube in place of a glass; by this means the animal may be compelled to bite at just the point desired.

EXTERNAL USE OF DIGITALIS IN SUPPRESSION OF URINE.

Dr. C. P. Russell, in *British Medical Journal*.—A married woman, aged 35, was attacked by acute albuminuria. The disease resisted the usual remedies. She became extremely oedematous, with congestion or oedema of both lungs. Respiration rapid and pulse weak and rapid. She became semi-comatose and there was suppression of urine for 36 hours.

The case appeared hopeless, but having read in the *Journal* of a case in which the external use of digitalis was effectual in restoring the secretion of urine, I determined to try it. I ordered a half ounce of the tincture on a large linseed-meal poultice, to be applied to the abdomen. Next day I was agreeably surprised to find her vastly improved, quite conscious and cheerful. The oedema was very much diminished, respiration was easy and the pulse nearly natural. I was informed, that in one hour after the application, a copious flow of urine commenced and continued all night—and, what was very remarkable, the urine which the day before contained a large quantity of albumen, was now quite free from it. Convalescence was rapid, and she is now quite well.

SALICYLATE OF SODA IN RHEUMATISM.

Salicylate of soda need rarely be given in larger doses than from one to three drams daily in order to produce all its best effects, which will be marked in one or two, or three days at most: and then the dose should be gradually diminished until some time after complete convalescence has set in.—*Maryland Medical Journal*.

SYRUP OF DOVER'S POWDER.

The officinal preparation of Dover's Powder has been changed into a liquid and a more palatable form. The syrup contains an equivalent of five grains of Dover's Powder to each teaspoonful, and it is found by many of our physicians equally as reliable and efficacious. In the use of an anodyne and expectorant in

cough syrups, and as a diaphoretic in febrile disorders, this new form is found to be very convenient for administration and satisfactory in its effects.

THE following article will be recognized as a very apt and pointed burlesque upon a subject which has more than once deserved ridicule. All medical men, not themselves mechanical geniuses, must have been impressed with the absurdity of the pretensions of many so-called inventions and improvements. The majority are useless; the minority rarely involving a new mechanical principle or a re-adaptation of an old one; the change trivial and unimportant, being nothing more than would occur to the average practitioner in any moment of need. The really valuable inventions are best honored by observing and emphasizing this distinction.

AN ACCOUNT OF THE PERINEOSINUEXEREEINATOR,

A NEW INSTRUMENT FOR THE EXPLORATION OF SINUSES—

ESPECIALLY ADAPTED TO GYNECOLOGICAL PRACTICE

BY JACQUES ROBINSON, A. M., M. D., SURGEON, &C.

To the Editor of the Louisville Medical News :

I desire to call your attention to a new instrument which I have had the honor to devise, and through your columns to claim priority in its invention.

That I may be just to all parties, I may first state what were the evolutionary stages through which my instrument passed before it reached its present perfected shape.

Some years since—the exact date has escaped me—Dr. Smithe, the eminent gynecologist of Jonesville, gave to the professional world his since celebrated probe, a figure of which accompanies my text. This instrument has been known as the Smithe probe.

(GEMRIG.)

THE SMITHE PROBE.

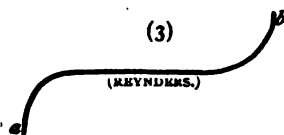
It is three inches long, about the size of a knitting-needle, and is made of white metal. It has served an excellent purpose in the exploration of perineal sinuses; but it soon became evident that for sinuses which exceeded three inches in length the "Smithe probe" would not do. We are indebted to the genius of Dr. Jones, the renowned uterine pathologist of Smithville, for a solution of this difficulty. Dr. Jones modified the Smithe

(TIEMANN.)

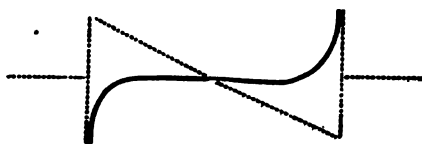
THE JONES MODIFICATION OF THE SMITHE PROBE.

instrument so as to make it *four* inches long instead of three, thereby allowing sinuses of increased depth to be examined.

This was a great improvement, but the instrument was not yet perfect. Both the Jones and the Smithe instruments were confined in their operations to sinuses which were perfectly straight, and this fact led that obstetrical wonder, Dr. Brown, to devise an instrument which could be used in the exploration of sinuses which were deflected from a direct line. Dr. Brown also bore in mind the important fact, which was demonstrated by the Viennese school, that sometimes the sinus runs up and sometimes the sinus runs down. To meet this double difficulty he constructed a probe, which upon its right extremity ascends in a gentle curve, while upon its left extremity it descends in a similar manner. The accompanying diagram will illustrate these peculiarities perfectly, and will also show the capacity of the



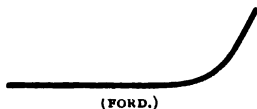
BROWN'S MODIFICATION OF THE JONES-SMITHE PROBE.



instrument for deflection from the normo-rectal direction. In diagram 3 *a* represents one end of the probe and *b* the other. The other figures explain themselves.

It might have seemed, with these instruments before the profession, that hardly any thing more was to be desired for the convenience of the gynecologist; but my experience, which is by no means limited, has taught me that there are still objections to be urged to each of the instruments named, and I have endeavored—and I think that you will allow I have succeeded in my endeavor—to combine in one instrument the excellencies of all, with the imperfections of none.

The Smithe instrument was too short, the Jones modification was too straight, and the Brown modification was too curved, and, as will be seen at a glance, can be *only* used in deflected sinuses. I have therefore, after much experimentation, constructed an instrument, after the pattern in the accompanying



ROBINSON'S MODIFICATION OF THE BROWN-JONES-SMITHE PROBE.

diagram, which it will be seen is curved at one end and straight at the other. If the sinus is straight, then the straight end is used; if the sinus is curved, the curved end is used. If it point upward, the curve is pointed in a similar direction; if it point downward, the curve is simply reversed (Q. E. D.) So, also, I have caused my instrument to be made of two sizes—one three inches long, the other four—that it might cover the same field with the Smithe instrument and the Jones modification.

I trust, Mr. Editor, that with this showing there will be no gainsaying that I have made a real advance in our art, and that hereafter no one will endeavor to claim my invention.

J. ROBINSON, M. D.,
Surgeon to the Hospital for Ruptured Vesicles,
Member of the Anteversion Society,
the Round-Ligament Club, etc.

BROWNSVILLE.

ILLUSTRATIVE CASES.

Since preparing for print an account of my new instrument—which I have named for convenience the *Perineosinuexereinator*, the last paragraph of which being derived from the Greek word meaning “to explore”—a number of cases have occurred in my practice illustrating its usefulness in demonstrating both the presence and absence of sinuses. I select the following for publication:

Case I.—Mrs. A. B., aged forty years, female, brunette, bilious temperament, native of Kentucky, residence in Louisville, 397 West Thirty-Sixth Street, north side (up stairs); married 4th of July, 1866 (no cards); three children, named respectively Thomas, Richard, and Henry; weight, one hundred and twenty-three pounds (somewhat greater after eating.)

She states that her appetite is pretty good when she is hungry, generally sleeps at night, and is about during the day. Had suffered the week previous to her visit to me with perineal furuncle, for which ordinary remedies had been used, and it had discharged. Suspecting a sinus had resulted, I made exploration with the smaller of my instruments, and verified my diagnosis. Sinus measured .2 centimeter in depth. *R* Argent. nit., to be used locally, and to take fluid ext. black haw. Cured.

Case II.—Mrs. MacF., Italian, aged fifty years, widow; occupation, attending clinics; parents dead; uncle living, also a number of cousins. Subject of retroflexion since birth of first child, thirty years previous. Has improved steadily under pessaries, which have been worn during the last ten years. Sinus suspected. None found. Diagnosis, chronic retroflexion. Treatment: hysterotomy (declined;) pessary continued; seabathing, and a trip to Europe.

JACQUES ROBINSON, M. D.

PARTIAL DISLOCATION OF THE FOURTH CERVICAL
VERTEBRA DUE TO MUSCULAR ACTION.

BY JOHN A. WYETT, M. D.

On the morning of March 7 I was summoned to see a lady, who, I was told, had injured her neck. The history of the accident was as follows: In the act of bathing, while standing with the neck twisted, (the face being turned sharply to the left) she had lifted the right forearm and hand over the right shoulder, and was sponging herself between the scapula. While in this position she was seized with sudden and intense pain in the neck, more especially the right side. On arriving about thirty minutes after the accident, I found her suffering intensely; the neck was twisted to the left and immovable, and the face turned and looking over the left shoulder. Her left hand was grasping the right side of the neck over the fourth cervical articular processes. She complained that she could scarcely breathe, and that there was a painful numbness running down the right arm. On running my finger down along the processes of this side, I found there was an intense pain on pressure at the junction of the right articular processes of the fourth and fifth vertebra. Seizing the head I carefully attempted to rotate it to the right, but the entire body turned with it. Feeling confident that there was a dislocation forwards of the fourth articular process of the right side, upon the fifth, I seized the head from behind, on both sides, placing each hand with the thumb under the occiput, and the fingers under the jaw and chin, and turned the head slightly to the left, then made strong extension and rotated to the right. The head turned into its position without any trouble, and the pain instantly ceased. I moulded a shellac splint on the right side of the neck, and over the shoulder of the same side, and threw a figure of 8 roller around this shoulder and the neck. During the next two days there was considerable pain in the right arm and side, and along the track of the cord, which was relieved by morphine.

The patient recovered fully in a week, and has not since suffered. It is now more than three months since the accident. Dislocation of a vertebra, without fracture, is in itself a rare

accident, and a simple displacement by muscular contraction has, as far as I am informed, not been reported. I am fortified in the correctness of the diagnosis in my case by the following facts:

1. There was complete fixation and immobility of the neck, which was relieved by the successful reduction.
2. Interference with respiration, showing that the filaments of the phrenic nerve were pressed upon. Pain in the arm, due to pressure on those filaments of the fifth nerve escaping from the fourth intervertebral foramen, which join the brachial plexus. Pain in the track of the cord, due to the slight pressure it received from an incomplete dislocation of the body of the vertebra. Entire disappearance of these symptoms at the moment of reduction.
3. That there was no fracture, was evident from the absence of crepitus and the rapid recovery. The symptoms could not have resulted from rupture of muscle or tendon, because it would not have rendered the neck immovable, nor would the pain have disappeared so rapidly in case of rupture, where there would have been more extravasation and consequently more material for absorption.—*The Hospital Gazette.*

EDITORIAL.

WITH the present number, the BUFFALO MEDICAL AND SURGICAL JOURNAL enters upon a new volume, and is presented to the profession under a new management and in an improved form. It is becoming to acknowledge that the high standing heretofore maintained by this JOURNAL, is due to the distinguished abilities of its past editors, Dr. Austin Flint, Sr., Dr. Austin Flint, Jr., Dr. Sanford E. Hunt, and Dr. Julius F. Miner; and in such a prestige, the new editorial staff makes its salutatory bow with the modesty becoming the debutante. The demands of the profession of to-day are fortunately so clear and well defined, that we have the plain duty before us of laboring with

earnestness and energy to fulfill them satisfactorily to the numerous friends who have given the JOURNAL their constant support and sympathy in the past. We realize that a publication of this character is read mainly by busy practitioners in search of facts to be utilized and applied in the daily demands of their profession. Questions of a general or theoretical nature are of little interest to them, however attractive they may prove to the specialist. The first great aim, therefore, will be to give the JOURNAL an eminently practical character.

It is also anticipated that certain advantages will result from the plan of apportioning the labor into departments in charge of those qualified for the special duties assigned them. With this end in view, the work will be divided as follows :

Obstetrics and Diseases of Women and Children, by Dr. Lothrop.

Practice of Medicine and Pathology, by Dr. Van Peyma.

Chemistry, Materia Medica and Pharmacology, by Dr. Davidson.

Surgery, by Dr. Mynter.

Ophthalmology and Otology, by Dr. Howe.

This division of labor is a necessity demanded by the rapid advancement of medical science, and by the conviction continually forced upon the physician, that

"One science only will one genius fit,
So vast is art, so narrow human wit."

It is expected that the original articles will be in keeping with the high standard of literary and professional excellence that has characterized the past history of the JOURNAL. Its great advantage, however, will consist in condensed articles, culled from the most recent publications; nor will these be taken from English sources alone, but will embrace the latest records of medical and scientific research, translated from German, French, Dutch, and Scandinavian medical literature.

No labor will be spared to present in each monthly issue a digest of important facts, based on sound professional and ethical principles, which will aim to advance the interests of medical

science, and fulfill the highest purpose of the medical press, to impart knowledge and disseminate information in the interests of humanity:

A WORD FOR THE JOURNAL.

BY PROF. J. F. MINER, M. D.

CONGRATULATIONS are due the readers of the new volume of the JOURNAL upon its improved appearance and enlarged scope. For the past many years it has been issued regularly to subscribers, and has been all, and just what, the profession has made it. It now passes into the hands of a corps of editors, who by their united efforts will be able to bestow upon it much labor and thought. It must, however, continue the child of the profession, and be what its care and cultivation make it. The editors are educated, earnest, capable men, and will do their part with faithfulness and fidelity, and if at any time the profession should conclude that there is any defect or want of interest in the JOURNAL, it may also conclude that Buffalo physicians are defective, and not that the editorial staff are inactive or incapable. The JOURNAL, if it is poor and unworthy of support, shows how poor and barren of thought the whole body of the profession in Buffalo and vicinity may be regarded, by those best able to judge. But of the future JOURNAL there can be no doubt. The whole profession, within the scope of its circulation and influence, are ready for its support; all are interested in the practice and progress of medicine.

In withdrawing from the editorial conduct of the JOURNAL, I bespeak for my successors, the support and favor of old friends whose interest and help have been a continual strength to me. This I am sure can not be lessened by change or time, and will be as freely and generously extended to my successors as it has been kindly bestowed upon me.

TO THE MEDICAL PROFESSION.

THE retirement of Dr. Miner from the editorial chair, which he has so long and ably filled, and the strong and earnest words of sympathy expressed in his valedictory, call for a word to the numerous subscribers and patrons by whom the monthly visits of the JOURNAL have been cordially welcomed in the past.

By an arrangement with the late editor, all subscriptions paid to him will be continued until the date of their expiration. All subscribers in arrears will settle with Dr. Miner *up to July 1st*. In such cases the August number will commence a new subscription. In order to adapt the JOURNAL to the demands of the times, the subscription price has been reduced to \$2.00 per year, in advance, while the size of the JOURNAL remains the same. It is intended to present bills for subscriptions, and we request a prompt response. An active, live journal, devoted to the interests of the medical profession, can only be maintained by an equally active and live constituency; and we have the confidence that the same earnest wishes for success and active co-operation on the part of the friends of the JOURNAL which have been manifested in the past, will continue with the present management.

The JOURNAL will strive to present a faithful record of the proceedings of the medical societies of Buffalo and vicinity.

We beg the old friends of the JOURNAL to renew their subscriptions promptly, to send new subscribers, to report cases of professional interest, and thus enlarge the field of labor which it is the design of those upon whom its management now depends, assiduously to cultivate.

EDITORS.

REVIEWS.

Lectures on Practical Surgery. By H. H. LOLAND, M. D., Professor of Practical and Clinical Surgery in the University of California. Second Edition. Illustrated. Philadelphia: Lindsay & Blakiston. 1879.

This work we infer is designed as a class text book in the medical department of the University of California, and is well adapted to this object. As a report of lectures it is quite com-

plete, forming a text book of quite extensive scope. The conclusions of the author are quite unlike our own on some subjects; for instance, he says: "Resections of the hip-joint present no difficulty in the execution. I have performed the operation myself three times, but have not been satisfied with the result, and I do not think that I could under ordinary circumstances be induced to repeat it. In children the limb may be saved; but it is attached to the pelvis by the muscles, and is nothing better than a dangling mass of bones and flesh. Recently I have resected the femur, the details and results I will give elsewhere. Amputation of the hip is much better than resection. When the head of the thigh-bone is exposed, there frequently and indeed almost universally, exists caries of the acetabulum, which it becomes necessary to remove. This of course destroys the articulating surfaces, and consequently the use of the lower extremity."

This is quite unlike our own experience, and we quote it so as to show both sides. Other conclusions of the author strike us as remarkable, but space prevents extended mention. J. F. M.

Notes on the Treatment of Skin Diseases. By ROBERT LIVING, A. M., F. R. C. S. William Wood & Co., 27 Great Jones Street, New York. 1878.

The work consists of short notes on the etiology and treatment of skin diseases, and were prepared for the students in cutaneous medicine, at the Middlesex Hospital, but the little volume is adapted to all students of skin diseases, and will be appreciated by general practitioners as well as by students of medicine. J. F. M.

Lectures on Bright's Disease of the Kidneys. By J. M. CHARCOT, and Translated by HENRY B. MILLARD, M. D., A. M. New York: William Wood & Co. 1878.

This work is comprised in seven lectures, giving the normal anatomy of the kidney with physiological considerations, and a summary of views of Bright's disease, nephritis, and the lesions produced in all its various forms, the scarlatinous kidney, amyloid kidney, &c., &c. The work is written with great care and precision, embodies the whole subject and affords us a clear, comprehensive, condensed, practical treatise upon the important

subject of Bright's disease. No work could afford us more instruction, or outline the practical features of the disease more clearly. More voluminous treatises are published, but we believe none more complete or practical. J. F. M.

An Atlas of Human Anatomy; illustrating most of the ordinary dissections and many not usually practiced by the student, accompanied by an explanatory text. By RICKMAN JOHN GODLEY, M. S., F. R. C. S. Philadelphia: Lindsay & Blakiston.

These plates are very beautiful colored representations of the the normal tissues as seen after dissection, and are invaluable for both the anatomist and surgeon, representing the relation and appearance of parts with astonishing accuracy. The work is in parts and sold at the low price of \$2.50 each part. J. F. M.

Diseases of the Throat and Nasal Cavities. By Dr. CARL SEILER. Philadelphia: Henry C. Lea. Buffalo: T. H. Butler.

It is an admirable little book, containing 150 pages and 35 illustrations. We recommend it most heartily to the busy practitioner, who has no time or inclination to study the larger special works. It presents in small compass the methods and instruments used in laryngoscopy and rhinoscopy, and the diagnosis and treatment of the most common affections of the upper air passages. M.

BOOKS AND PAMPHLETS RECEIVED:

Manual of the Principles and Practice of the Operative Surgery. By STEPHEN SMITH, A. M., M. D. Surgeon to Bellevue and St. Vincent Hospitals, New York. Boston: Houghton, Osgood & Co.

Transactions of the State Medical Society of Arkansas at its Fourth Annual Session.

Thevetia Iccotli and its Glucoside. By DAVID CERNA, M. D.

The Treatment of Epithelioma of the Cervix Uteri. By J. MARION SIMS, M. D.

The Popular Science Monthly, conducted by E. L. and W. J. YOUMANS.

A Clinical Treatise on the Diseases of the Nervous System. By M. ROSENTHAL, Professor of diseases of the Nervous System at Vienna. Translated by I. Putzil, M. D. New York: William Wood & Co.

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

VOL. XIX.—SEPTEMBER, 1879.—No. 2.

ORIGINAL COMMUNICATIONS.

ANTISEPSIS IN MIDWIFERY.*

BY THOMAS LOTHROP, M. D.

THE importance of prophylaxis in the puerperal state, prior as well as subsequent to parturition, is appreciated in proportion as we carefully consider and study the magnitude of the interests involved, and the extent of the responsibility assumed in its management. There can scarcely be a subject of more vital importance than that which investigates the dangers attending the child-bearing woman, and the means to be employed as a protection against such dangers. The wonderful impetus given to antiseptics in surgery by Lister, marks a new epoch in that department; and the diminution in the rate of mortality, after capital as well as minor operations, attest the triumph of the principles he enunciated, and the methods of procedure suggested by his fertile genius. The aim of all antiseptic precautions in surgery, however, is to prevent the microscopic germs or bacteria from contact with the solution of continuity in animal tissue, produced by the knife. The germ theory is the basis of every device and plan, adopted in the methods of this

* Read before the Buffalo Medical Club, March, 1879.

remarkable man, who has left his impress indelibly stamped upon the age in which he lives and the profession he adorns.

In midwifery, another factor, quite as important as that comprehended in the germ theory, is presented in the solution of the problem of morbid phenomena, observed in the puerperal state.

In all ages of the past, the profession have recognized the fact, that the absorption into the living organism of the organic elements of animal tissue, in the process of putrefaction, produces hemorrhagic infiltration, degeneration of parenchymatous organs, softening and mortification, in a word that condition of the system termed typhoid and zymotic. The influence of septic infection in the causation of puerperal disease is acknowledged by every writer in the department of Gynecology and Obstetrics.

Florence Nightingale, in her philanthropic enthusiasm, lays down the following propositions: 1st—"That lying-in patients should be perfectly well as in health. 2d—That no woman ought to die in her lying-in. 3d—That a case of peritonitis or puerperal fever ought never to arise after delivery." Now, while such broad assertions may have been inspired, through self-sacrificing efforts and labors for the amelioration of the sufferings of the race, by the nobleness of that noble woman's nature, the position she assumes involves the question of the origin of disease, which is entirely beyond the scope of human knowledge. The fact must be accepted that woman dies, directly or indirectly as a consequence of the puerperal condition, just as philosophically as we accept the existence of sin, the legacy bequeathed by the transgression of our first parents.

The rate of mortality from the puerperal condition is justly a source of alarm and anxiety to the woman, as the hour of maternity approaches and of opprobrium to the profession, to whose skill the management of this critical period is entrusted. In the department of surgery, to which reference is made above, the diminished rate of mortality is acknowledged to be one of the

results of modern scientific research, and of the application of measures, devised by the most assiduous labor, to secure the important end, always held in view by the profession, the preservation of human life. Is there not as wide a field for study in obstetrical science, with the same noble end to be attained, the diminution of the death-rate, and yet more, the prevention of the sundering of sacred ties which the family circle with its increased responsibilities involves? The lying-in chamber calls for the application of like principles and measures to thwart perils, and to counteract dangers, more important than the perils and dangers which accompany the knife of the surgeon in its noble work for humanity.

In 1875 the International Congress of physicians, at Brussels, after a full discussion, adopted the following propositions:

- 1st. A thorough reform in the help of the lying-in room.
- 2d. Large lying-in hospitals should be abolished, and their place supplanted by small institutions with separate rooms.
- 3d. Confinements in the houses of the patients should be encouraged.
- 4th. These measures will secure a diminished rate of mortality.

This action of the most eminent obstetricians and physicians of the old world is entitled to great respect by the profession on both continents, and should exert a salutary influence in this important department of professional labor. The above propositions were doubtless called forth by the custom, prevailing largely in the great centres of population in Europe, of women of the lower and poorer classes seeking the hospital as a refuge in their approaching confinement. This practice prevails but to a limited extent even in the large cities of this country. The experience of the profession on the continent will lead to a more general effort to bring the rate of mortality in the puerperal state down to the minimum, while the methods of application of protective and sanitary principles will necessarily vary on account of the varying circumstances of locality, habits of people, etc.,

etc. On the continent the hospitals require a reformation in their principles of construction and methods of arrangement ; here the homes, often of the affluent, and more frequently of the humble, must witness whatever of prophylactic and sanitary principles the profession may desire to adopt.

Vital statistics, on this side of the Atlantic, are too imperfectly kept to form a reliable basis, upon which to make even an approximate estimate of the rate of mortality from the puerperal state in this country. Reference must be made to the careful study of this question in Europe, where the subject in all its phases has received special attention.

England is said to furnish the most reliable data, the laws regulating its vital statistics being better enforced than on the continent. In 1847, it is stated in the Registrar General's Report that the mortality in child-birth in England and Wales, was 1 in 167, and in 1856 the death-rate had fallen to 1 in 227 cases.

Mathews Duncan, in his work on the " Mortality of Child-bed and Maternity Hospitals," found the total mortality during the first six weeks after confinement in *home practice* to be 1 in 107 in Edinburgh and Glasgow in 1855.

McClintock * secured valuable data, by taking the house practice of nine entirely reliable physicians who had a total of 16,774 cases, with 45 deaths from accidents in labor, 52 from puerperal fever, and 34 from non-puerperal diseases, or one death in every 128 cases. The same writer publishes the results in his private practice of 652 cases, with 6 deaths, or 1 death in 108 cases; and with great assiduity he has gathered from other prominent obstetricians 16,108 cases, with 120 deaths, or 1 in 134. These cases were among the middle and upper ranks of society.

Duncan furnishes the result in his own private practice as 8 deaths in 736 cases, or 1 in 92.

* Dublin Quarterly Journal, 1869.

After a very careful examination of the reports, returned by the Registrar General of different countries, Duncan furnishes the following valuable facts :

Paris, in 1860, one death in	-	120 cases.
St. Petersburg, " - -	-	112 "
Dublin, " - -	-	86 "
Edinburgh, (1860 to 1865) one death in 122	-	"

In Copenhagen, outside of the Maternity Hospital, 108,737 women were delivered during the 25 years from 1850 to 1874, 885 of whom died from puerperal fever alone, or 1 in 123.

Since 1873 we are furnished with direct means of ascertaining the death-rate, not only from puerperal fever, but also from other causes. Since that date all deaths, due to parturition, and the puerperal state, are registered in two classes, one for puerperal fever, and the second for child-birth and child-bed, exclusive of puerperal fever.* From these statistics we find 127 deaths from puerperal fever and 54 from other causes. This makes the death-rate in Copenhagen in the hospital and in the city at large to be 1 in 86 cases.

Summarizing the data from these various sources, excluding those that cannot be relied on, the average mortality is found to be 1 in a little over 100 cases.

Edinburgh and Glasgow in 1855,	-	0.93 per ct.
Paris, St. Petersburg, Dublin and		
Edinburgh, - - -	-	0.92 "
Copenhagen, - - -	-	1.16 "
Duncan, McClintock, and other prom-		
inent Obstetricians, - -	-	0.75 "
Average, - - -	-	0.94 per ct.

In view of the above facts, an eminent philanthropist makes the following pertinent remark :

"One feels disposed to ask whether it can be true that in the hands of educated accoucheurs, the inevitable fate of women,

* Physicians' Weekly Journal.

undergoing not a diseased, but an entirely natural condition at home, is that one out of every 100 must die."

The rate of mortality in many of the hospitals of the old world may be of interest in this connection. In the Lariboisiere, in Paris, there has been an average mortality of nearly 8 per cent. of lying-in women. In one service of the lying-in hospital in Vienna the average death-rate for the six years, from 1841 to 1846, was almost 10 per cent. During the four years from 1860 to 1864 in the Maternité of Paris, the average mortality was 11 per cent. The Rotunda of Dublin, which is more than a century old, and has had over 190,000 deliveries, has experienced a death-rate of 1 in 72 cases, and for long periods less than 1 in 100 cases. In this hospital, for the seven years, from 1869 to 1875, the death-rate was 1 in 48 cases, or 2.1 per cent. In the Royal Lying-in Hospital of Dresden, considered the finest on the continent, the mortality was 1.1 per cent. in 1869 and 1870; 0.9 per cent. in 1871, and 5.2 per cent. in 1872, the latter being the result of an epidemic. Under the service of Winckel, who became physician-in-chief in 1872, the death-rate was reduced again to 2.3 per cent. in 1873; 1.2 per cent. in 1874, and 1.3 per cent. in 1875. These results were obtained only by the adoption of the most stringent sanitary measures.

The New York lying-in institutions furnish valuable data upon this subject. In the Lying-in Asylum, 85 Marion street, the death-rate from 1856 to 1866 was 1.1 per cent. In the New York Infant Asylum, 24 Clinton Place, for the five years from 1872 to 1876, there were 418 cases and only 5 deaths, or 1.2 per cent. The Infirmary for Women and Children, No. 5 Livingston Place, during the nineteen years, from 1858 to 1876, 1350 women were confined, with a death-rate of 1.2 per cent.

The Nursery and Child's Hospital, corner Lexington Avenue and Fifty-First street, from 1865 to 1876, had 1479 confinements and 60 deaths, or 4.1 per cent.

In the Charity Hospital, on Blackwell's Island, for the two and a half years, from 1874 to 1876, there were 1381 births, and 36 deaths, or 2.6 per cent.

The State's Emigrant Hospital on Ward's Island, for nine years, from 1868 to 1876, there were 3766 confinements, and 99 deaths from all causes, or 2.9 per cent.

In referring to the statistics of diseases to which lying-in women succumb, it will be observed that puerperal fever is the most prevalent and fatal. For instance, in Copenhagen, in the years 1873, '74, '75, there were 127 deaths from puerperal fever, to 54 from all other causes. This proportion will vary at different times, but the fever will always be in excess of other diseases. This is important in considering the question of prophylaxis. The pathological conditions, common to this period, and the necessity for the adoption of preventive measures to counteract the danger of septic infection, are apparent. Puerperal septicaemia and pyaemia may also be classed in this category. Diseases arising from traumatism, as a primary condition, have also an important relation with this question.

It is admitted, also, that puerperal fever may be auto-genetic in its origin. Poisonous materials may be generated in the system under the strain of labor; the blood may be surcharged with noxious matter, resulting from tissue changes, the materies morbi being unknown, and producing a disease as distinct as typhus or typhoid fever.

Puerperal fever may also arise from septic infection. Under the combined influences of traumatism, and of the blood impaired by the tissue changes of pregnancy and parturition, and also of the decomposing debris of placenta and blood-clots in the uterus, septic materials are thus supplied in the uterine cavity itself, and through the absorbent surface offered by the mucous membrane, are taken up and transmitted to the system. This factor, allied to the conditions producing puerperal septicaemia, is of special importance in view of prophylaxis. These hetero-genetic causes imply a peculiar susceptibility in the system, which must be met by other than local measures, although local measures are not without a marked influence. While there are conditions of the system local and general, predisposing to

the complications often met with in the puerperal state, the great exciting cause, paramount to all others in the causation of these peculiar pathological phenomena, is parturition acting upon the systemic changes, which precede the completion of utero-gestation.

The structure and functions of the mucous membrane lining the uterine cavity, and, to a limited extent, the vagina, possess peculiar significance in considering the diseases, resulting from the puerperal condition, subsequent to the completion of the parturient effort. That its structure undergoes changes in its development to fit it for the special office the uterus holds in the economy of nature, has been fully demonstrated by Engelman and others. Not the least important element in its structure are the small tubular glands, generally running perpendicular to the surface, often bifurcating in their lower third, and then becoming imbedded in the substratum of connective tissue. According to Engelman there is an entire absence of submucous areolar tissue. Now under the stimulus of menstruation, and to a yet greater degree, of pregnancy, these glands are many times enlarged, the increase in their length being greater than the increase in the thickness of the mucous membrane in which they are imbedded, while there is an intense vascular injection of even the finest vessels. The orifices of these glands become more widely separated from each other as they are developed, and are like funnel-shaped depressions in the thickened mucous membrane.

The provision which nature makes to prepare for the impregnated ovum a safe repository in which the successive stages of its development can go on uninterrupted by external circumstances, becomes a source and avenue of danger as soon as the fully developed ovum vacates its retreat, and begins an independent existence.

It would be foreign to the purpose of this paper to consider the special office of the glandular structures in utero-gestation, and they are referred to in this connection, to direct attention to

their power of absorption, which is one of the functions of the membrane, of which they form an important element. The great development of the glandular structure has its purpose in meeting the demands of osmosis, set up between the maternal and foetal circulation, and its power of absorption is correspondingly increased with the development of its histological elements.

The increased extent of this absorbing surface, due to the increased length and width of the uterus, and the influx of blood to all the pelvic organs under the special stimulus of pregnancy, constitutes an important element of danger. It is well to lay stress upon these facts, and to direct attention to the danger thus entailed upon the parturient woman, which is not sufficiently considered by many physicians in obstetrical practice. Too much dependence is placed upon the excretory function of the mucous membrane lining the uterine cavity, while the function with which it is also invested, of absorbing fluids, the debris of tissue, most of which is septic material, always abundant during the disintegrating process, instituted by nature to return to the status existing prior to impregnation, is lost sight of. The result is the frequent occurrence of septic and zymotic disease, making too often the lying-in room the scene of suffering and death.

Considerations, such as are presented above, bearing upon the mortality of the puerperal state, subsequent to parturition, and the physiological and pathological causes leading thereto, suggest naturally the inquiry: "What measures can be adopted to diminish the dangers and the mortality of the lying-in chamber?" It is to the practical aspect of this question, omitting all theoretical considerations, that the writer directs attention, believing the accoucheur should bestow the same careful attention to minute details in parturition that the surgeon adopts to thwart the contact of the invisible germs floating in the atmosphere and following every movement of his knife.

As a practical illustration of the influence of antiseptics in midwifery, I beg to refer again to the lying-in asylum of Copen-

hagen,* in which the plan has been fully tried. During 22 years (1822 to 1843), 21,149 women were confined there, of whom 1,096 died of puerperal fever, or 1 in 19. Influenced, by the remarkable results obtained in the surgical service by the adoption of Lister's method of operating and of dressing wounds, Stadfeldt, the physician-in-chief, introduced a strict preventive antiseptic treatment. A small room was set apart for deliveries, and from 2 to 6 hours after delivery, the patient is brought in the bed in which she has been delivered into one of the rooms, opening on the other part of the corridor. Inasmuch as the establishment is a school for the training of midwives, the pupil goes with her patient from the delivery apartment, to the lying-in department, and when the patient leaves, the nurse takes a bath, and her body and clothes are disinfected in the following way: connected with the window of a small room is a *hose* of sufficient size to cover the head, allowing space for free respiration, while her person and clothes are subjected for a quarter of an hour to the fumes of sulphurous acid. Before and after digital examination per vagina, the hands are washed with a solution of carbolic acid, and all instruments used in operation are disinfected in this carbolized water. If possible the confinement takes place under a spray of the same disinfectant, vaginal injections with carbolized water (1 pt. to 125) are used in every patient twice a day; all lesions are dressed with carbolized ointment, and the external genitals covered with carbolized oil, which, of late, has been replaced with salicylic acid in ten parts of wheat flour, powdered over the parts two or three times daily. The patient rests on a sack, filled with chaff, both sack and contents being burned when the patient is discharged. Each patient is allowed a pillow of hair, and also blankets, and if the delivery has been attended with anything abnormal, these articles are thoroughly cleansed. The room remains empty after each confinement, and is often disinfected. The same bed-pans, syringes, and catheters, are never used for the sick and the well. The water-closets are disinfected

* Gynecological Transactions, 1877.

every day. The after-births and soiled clothes are immediately thrown into a pail containing a strong solution of chlorinated lime and burned the next morning.

The result of this antiseptic treatment accomplished all that was expected of it. During the 20 years, from 1850 to 1869 inclusive, there were 21,675 deliveries, of whom 815 died of puerperal fever, or 1 in 26, while during the 5 years, from 1870 to 1874 inclusive, in which special attention was directed to antisepsis, there were 5,304 deliveries, with 61 deaths from puerperal fever, or 1 in 87; the highest mortality being 1 in 75, the lowest 1 in 170.

These figures show the relative value of antiseptic measures in this hospital alone, in which many of the conditions existed, which brought about the terrible mortality of 1 in 19 cases, reported prior to 1845.

The value of antisepsis in puerperal septicaemia will be best demonstrated by the report of a case.

Mrs. A., aged 35 years, a native of the United States, was confined May, 1875, after a tedious and protracted labor; the placenta came away soon after, and seemed to be accompanied with all the membranes in which the foetus had been previously invested. The progress of this case was uniformly good until the 10th day after delivery, when abdominal pain and difficult micturition came on. The lochia were scanty and of a fetid odor; temperature 103; pulse 107; morphia $\frac{1}{2}$ grain was injected; warm fermentation applied to hypogastrium, the urine drawn with the catheter, the vagina thoroughly washed with carbolyzed water, and opiates repeated to maintain rest and freedom from pain. In the evening of the same day there was but little pain, loss of appetite, dry tongue, some tympanitis, temperature 105, pulse 114. The injections of carbolic acid were repeated, the nurse being directed to carry the nozzle of the syringe as high as possible, and throw the antiseptics as near the os uteri as it was possible to do. At near midnight I was summoned in haste, found the patient in a severe chill, with no pain, face flushed, the pupil's natural and but little tenderness over the

abdomen; the pulse was 150 per minute, the temperature 107. With a flexible male catheter attached to a Davidson Syringe, I carried it up to the fundus of the uterus and thoroughly washed out the uterine cavity with carbolized water at a temperature of 99°. Brandy was freely given with tr. opii as an adjuvant. After the injection the temperature fell to 104, and the pulse to 123.

At 2:00 A. M., pulse 115, temperature 102.8, and the patient warm and sweating profusely.

At 3:00 A. M. I left her with a pulse of 115, temperature 102.5, and with no pain.

At 10.00 A. M. following day, pulse 105, temperature 102.

8 P. M., temperature 103.1, and pulse 112.

From this date the patient convalesced without unfavorable symptoms, and in due time was discharged.

The marked influence of antiseptic injections into the uterine cavity, in the above patient, may have been almost exceptional, but the case elucidates more fully than words can express the advantages of the application of these principles of treatment in the puerperal state, and it is for this purpose here reported. In looking over the literature of the subject, I have found cases reported of even greater professional interest and attended with equally satisfactory results.

Referring to intra-uterine injections in puerperal septicaemia, Dr. Fordyce Barker, who is one of the clearest thinkers the medical profession of this country has yet produced, says: "I should certainly not hesitate to recommend them, if the history of the case and the symptoms indicate that the septicaemia was the consequence of, or was complicated with, endometritis."

There have been fatal cases attributed to this method of medication, but it may be justly questioned whether the care required in the minute details of the operation was duly observed. The injection into the uterine cavity of air is always hazardous and frequently fatal, and it is not too much to surmise that much of the danger resulting from intra-uterine injections may have arisen

from its presence in the syringe, and its careless introduction into the uterine sinuses.

It would be beyond the scope of a single paper to refer to other complications of the puerperal state, often met with in the experience of the obstetrician. The application of antiseptics to puerperal metritis and peritonitis and phlebitis, to pelvic peritonitis and cellulitis, and other diseases complicating this condition must be inferred from what has been said above.

While there is a great diversity of opinion in regard to the pathology of milk fever, many of the most prominent continental pathologists and obstetricians attribute the feverish excitement, occurring on the second or third day after parturition, to proceed from the bruising and injury of the genital canal during the progress of the foetus, and the subsequent absorption of septic matter from the lochia. In other words it is allied to wound fever. Winckel and Kiwisch support this view. Dr. D'Espine, a French writer, takes this position. The theory of wound fever seems to me so well proven, and substantiated by eminent authority that the application of antisepsis to the period of convalescence in the lying-in woman, at which this feverish excitement usually occurs, seems to be peculiarly indicated. In my own experience the effects of antisepsis in preventing the occurrence of the fever, have borne out the theory of the eminent writers to whom reference is made above; and the limited experience usually given to the general practitioner in the cases annually attended, is deserving of consideration by his professional brethren, who seek to secure additional safeguards to those who entrust their accouchement to his skillful management.

The facts presented above, may be summarized as follows:

1st. The puerperal state, prior as well as subsequent to parturition, calls for the rigid application of prophylactic principles and measures.

2d. The success of Lester's methods of antisepsis in surgery, calls for the employment of measures founded on the same principles in midwifery, especially in view of the additional factor (septic infection) encountered in the puerperal state.

3d. The average mortality, 0.94 per cent, or one death in little over 100 cases, the most accurate data furnished by reliable European authority, demands the serious consideration of the medical profession, and calls for earnest efforts to secure better results.

4th. Antisepsis in the Maternity Hospital of Copenhagen, affords a practical demonstration of the utility of such measures in obstetric practice.

5th. Puerperal fever can be limited by the free use of antisepsis.

6th. Septic infection may be controlled in many cases by the application of antiseptics to the intra-uterine mucous membrane.

7th. Milk fever, being essentially a wound fever, due to septic infection through injury done to the vaginal and uterine surfaces during parturition, is prevented by antisepsis.

Lastly. The considerations thus imperfectly presented, direct special attention to two important propositions. 1st, The large death-rate. 2d, Measures of prevention.

With these two points in view, the writer presents incontrovertible facts, such as have been within reach, avoiding useless theorizing, while asking for them the candid consideration the vital importance of the subject demands.

Should these feeble suggestions lead to the employment of the means above indicated, and the saving of even one, however humble and lowly, who has experienced "The strange and passionate precipitance of maiden into motherhood," the fullest purpose of the writer will be attained.

FRACTURE OF THE PATELLA FROM MUSCULAR ACTION.*

GOOD FIBROUS UNION—REFRACTURE FROM MUSCULAR ACTION—IMPERFECT FIBROUS UNION, WITH SEPARATION OF $4\frac{1}{2}$ INCHES—NO SUBSEQUENT IMPROVEMENT, OWING TO ATROPHY OF THE MUSCLES OF THE THIGH, UNTIL ALL KNEE SUPPORTS WERE LAID ASIDE.

REPORTED BY FRANK H. HAMILTON, M. D., NEW YORK.

AFTER Surgeon Myers consulted me he sent to me at my request, the following account of his case, from the records of the hospital at Yokohama, Japan, with corrections made by himself:

T. D. Myers, Assistant Surgeon U. S. N., aged twenty-eight years. Fracture of right patella. "Assistant Surgeon T. D. Myers, returning from the U. S. S. *Kearsarge*. . . . In attempting to get out of the steam launch, when quite a heavy sea was running, was thrown on to the platform of the gangway ladder so that his whole weight was received on his right leg in a semi-flexed position, and in that manner the patella was fractured by direct muscular action." (Copy from hospital ticket.)

Fracture occurred on the evening of the 19th of May, 1874, in the harbor of Yokohama, Japan.

Patient was placed in bed (on board the U. S. Flagship *Hartford*,) with the whole limb elevated, and the fragments approximated by a figure of eight bandage.

On May 21st patient was removed to the U. S. Navy Hospital, on shore, in the city of Yokohama, Japan.

Notes in quotation marks are copied from the "Hospital Journal."

"On entrance into Hospital the right patella, which is the bone fractured, was approximated by means of a figure of eight bandage, while a posterior splint of wood, with two side splints of pasteboard were applied to steady the limb."

* I am just now preparing a paper on "Fracture of the Patella," based upon an analysis of probably 150 cases. While referring to my notes I found the case reported here, which has some points of practical interest, and which seem worthy of publication entire.

F. H. H.

"May 24th.—Removed all bandages, re-applying them as above, adding a longer posterior splint. Patient is placed on a fracture bed and his limb is constantly kept on a single inclined plane. General health perfect."

"May 27th.—Applied Lausdale's apparatus."

"May 31st.—Doing well. Obligated to take morph. sulph. grs. ss. ($\frac{1}{2}$) at night to relieve pain caused by the apparatus. Also applied roller to whole limb to quiet muscular action."

"June 3d.—Doing well. The patella presents some signs of union."

"June 7th.—Doing well."

"June 10th.—Removed two days since Lausdale's apparatus, retaining only posterior splint, re-applying bandage as at first."

On June 8th Lausdale's apparatus was removed because the integument under the points of pressure, commenced to ulcerate. The pain was so severe that, although the patient was taking a half grain of the sulphate of morphia each night, he was unable to sleep. Patient did well from this time. Reparative action progressing uninterruptedly.

"June 21st.—Making passive motion. Removed the wooden posterior splint and applied one of felt, moulded to the shape of the limb."

"June 28th.—Continue the use of passive motion, and the application of the posterior felt splint. The bone has united by ligament, being separated something over half an inch on the inner side and about one-fourth of an inch on the outer. Walks about on crutches at present."

The ligament was shorter than stated above, and was V shaped or triangular in form, the base of the triangle being outwards.

"July 26th.—Continues to improve, can bend the limb at right angles, when the uniting ligament is found to be quite firm and strong. Continue the use of elastic knee cap and posterior splint with bandage."

The elastic knee cap mentioned in above note was applied some five days before, *i. e.*, about the 21st of June.

To obtain the extent of motion noted above, great care was necessary, and the limb was slowly and carefully flexed. The fracture, which was transverse, and situated so low down, *i. e.*, near apex of the bone, that the fractured surfaces, were very small, and the ligament, of course, corresponded with these surfaces.

"July 29th.—Removed posterior splint and bandage."

Patient walked well without any support other than that given by an ordinary elastic knee cap.

"Aug. 3d.—Returning to Hospital last evening at 10 P. M. patient slipped, and falling produced a partial rupture of the uniting ligament between the fragments of the broken patella. The knee became immediately greatly swollen. Applied a roller bandage."

The above note is not entirely accurate, in this, the fall followed the rupture of the ligament, *i. e.*, in the effort to save himself when slipping the rupture took place.

"Aug. 5th.—There is considerable echymosis about seat of injury. Removed roller and applied starch bandage."

"Aug. 7th.—The swelling of the knee subsiding, starch bandage has become so loose as to necessitate its removal, which was done. The ends of the patella were then approximated as closely as possible by means of adhesive plasters above and below, and a dry roller applied, over which was placed plaster of Paris bandages."

"Aug. 8th.—The dressing has been strengthened by a posterior felt splint and additional plaster of Paris bandages."

"Aug. 14th.—Removed plaster of Paris splint and found the fragments in good apposition. Re-applied bandage as before.

"Aug. 19th.—Again removed the dressing, together with adhesive plasters. The fragments were within one-third of an inch of each other by measurement. Applied dressing as before, together with adhesive strips."

"Aug. 29th.—Fragments one and one-third inches from each other. Plaster Paris dressing."

"Aug. 31st.—Renewed dressing, fragments quite widely separated, and it is difficult to detect any union. Removed plaster Paris dressing. Applied adhesive straps and a posterior splint of sole leather, after making passive motion."

"Sept. 6th.—Removed adhesive plaster. No new developments since last notation."

"Sept. 13th.—Removing adhesive plaster every third day, making at such times passive motion."

"Nov. 1st.—Employing adhesive plaster and elastic stocking and knee lap, together with posterior splint of sole leather. The fragments are widely separated."

On the 23d of November, patient left Yokohama, Japan, for the United States. Condition unchanged as noted above. Fragments about two inches from each other, with little or no union between them. While passive motion was being made, as mentioned above, the upper fragment was steadily pressed down to prevent, if possible, any tension on the connecting fibres, if any existed. Patient arrived in the United States, after a journey of over two months, by steamship, without any further change than a slight increase of the distance of separation of the fragments. General health somewhat impaired by long confinement and loss of exercise.

When Surgeon Myers consulted me, March 17, 1875, I advised removal of the knee supports, careful use of the limb in walking, passive motion, frictions and electricity, with the view of developing the muscles of the thigh; my experience in other similar cases having been, that the remaining attachments of the quadriceps to the sides and fronts of the tibia and fibula, through the aponeurotic expansions of this muscle, would in a great measure restore the power of extension and of locomotion. I did not then discover any fibrous bond between the fragments.

The following letter from Surgeon Myers will give the results of this experiment:

1136 GIRARD STREET,
PHILADELPHIA, PA., May 23d, 1875. }

Sir :—Since consulting you on the 17th of March, 1875, I have steadily pursued the plan of treatment suggested by you on that occasion. On March 23d, I took off the posterior splint, and have not re-applied it since. On the morning of its removal I forcibly flexed the knee by accident, and feared that I had severed the few remaining fibres of tendon; but after the inflammation subsided, I found that the fragments were not any more widely separated than before. And I now believe, that the only effect of the flexion was to break up some slight adhesions about the insertions of the inner ham string muscles. This accident confined me to my bed for three or four days.

The function of the limb has gradually returned, till now I am able to walk very well with very little, or, no limping. The limb is weak and soon becomes tired. In the past two months the fragments have separated more than an inch farther than when you saw them; there is now full four inches between the pieces. (According to my measurement it was $4\frac{1}{2}$ when I saw him.—F. H. H.) The Atrophy of the extensor muscles is gradually disappearing. The increased tonicity of these muscles, with the consequent greater tension on the connecting fibres will account for the further separation of the fragments.

I have been applying electricity daily as directed.

I have taken the liberty to mail to your address notes from the "Hospital Journal" with corrections, in my case. Hoping, that they may prove sufficient for any purpose of your own, I remain with much gratitude,

Yours respectfully,

T. D. MYERS,
Asst. Surgeon U. S. Navy.

Prof. FRANK H. HAMILTON.

TRANSLATIONS.

ILLUMINATION OF THE CAVITIES OF THE BODY BY A NEW INSTRUMENT—NITSCHÉ.

TRANSLATED FROM THE GERMAN BY A. OSTERDAY, M. D.

Not a little sensation is at present excited in surgical circles by the invention of a new illuminating apparatus, by which the surgeon is enabled to illuminate all cavities of the body accessible from the outside, as the bladder, rectum, stomach, etc., and inspect in such a manner that he may obtain a precise view of the internal condition of the illuminated cavities. Repeated

experiments made by Prof. Dittel, in the presence of eminent surgeons, on living subjects, have proved the extraordinary merits of the invention. Hitherto this apparatus has been used for illumination of bladder, urethra and rectum, and has proved itself most excellent. One may see in the illuminated bladder the smallest piece of gravel, the smallest injected vessel. The operator has not to depend on his manipulations and his sense of touch; if he seeks for stone in the bladder, or treats any other vesical disorder, he will simply inspect and then be sure what the matter is. Suffice it to say that the stomach-illuminating apparatus will soon have reached completion; its success seems to be assured. The inventor, a Saxon physician, Dr. Nitsche, has been working now for three years in perfecting his idea, and there seems to be no more doubt that he will be perfectly successful. The principle on which these new instruments are constructed, differs from the old endoscopes in this that the light is not thrown by a reflector from the outside into these cavities, but the light source itself is introduced by the instrument into these cavities, to the very spot intended to be inspected. The light source consists of thin platina wire, made and kept white hot by galvanism. To prevent the instrument from growing warm by the glowing wire, a constant circulation of cold water around the wire is kept up. The arrangement of the water circulation and wire is different, according to the anatomical differences of the several organs, but always so that a perfect and equal cooling of the instrument is produced. In this manner we are enabled to illuminate the different cavities with a degree of intensity that has never been reached before. By use of a special optical apparatus, we are further enabled to considerably enlarge the field of inspection, *i. e.*, it is then possible, through long and narrow tubes, to survey with one glance a large area, as by the use of this apparatus a six to nine centimeter ($2\frac{1}{2}$ to $3\frac{1}{2}$ inch) area of the walls of the bladder may be surveyed with the greatest distinctness without moving the instrument.—*Wiener Med. Woche* No. 18, May, 1879.

SELECTIONS.

INTRAVENOUS INJECTION OF AMMONIA.

DR. GRISWOLD, in the *Medical Record*, has an interesting article on this subject. He first made several experiments upon dogs, using the ordinary aqua ammonia (containing ten per cent. of ammonia gas), diluting it with an equal bulk of water. He selected for experiment dogs in which the viscera had been exposed for purposes of vivisection, and had become exhausted from loss of blood, and the depression attending the entrance of cold air into their thoracic and abdominal cavities. He waited in such a case until the heart had almost ceased to beat, its rhythm being disturbed, and its inefficient contractions no longer deserving to be called pulsations. He then injected into a convenient vein half a drachm of ammonia solution. After a period varying with the distance of the vessel selected from the heart, and with the rapidity of the circulation in the particular case, a marked change was observed. The heart had a moment before been dark and congested, its right cavities engorged, and the contraction of its fibres weak and uncertain. Suddenly the systole acquired new energy, which emptied the distended right ventricle into the lungs and filled the aorta with fresh oxygenated blood; the heart itself became right again as the new supply flowed in through the coronary arteries. The circulation was almost immediately re-established and the animal, if anaesthesia were not too complete, moved and showed signs of life. In the course of fifteen or twenty experiments he never failed to obtain the result described above. He has several times in Bellevue Hospital injected one drachm of ammonia solution into the veins of patients apparently moribund, and always succeeded in stimulating them much more powerfully than by other methods. On one occasion, a man came in a great hurry, having been notified that his brother was dying of phthisis. Notwithstanding his haste, the sick man was already

moribund and unconscious when he arrived. Pitying his disappointment of being too late for a few last words, the doctor injected a drachm of ammonia solution in the cephalic vein of the patient. In five minutes the man, who had appeared almost dead, was sufficiently restored to speak, and half an hour elapsed before he again became unconscious.

The doctor mentions several cases in which the result was apparent, but one case especially is so remarkable that we will reproduce it in full.

Hester Mahar, aged forty-seven, Irish, single. Admitted to Bellevue Hospital, April 29. On admission there was ascites, which had commenced a month before and was probably due to cirrhosis of the liver. Right pleural cavity nearly full of fluid, heart displaced to the left. No evidence of cardiac or renal disease. Patient very weak and compelled, from dyspnœa, to maintain a sitting posture. Abdomen tapped; seven quarts and eight ounces of clear serum withdrawn. Patient much relieved. Stimulants and nutritious diet ordered.

May 1. Patient very weak. Does not seem to suffer very much from dyspnœa, though the right side is nearly full. Considered advisable to postpone thoracentesis until the patient is stronger.

May 3. Patient still very weak; dyspnœa not marked.

May 4. Called by nurse to see patient. Found her breathing very little; weakness seeming to obscure the expression of dyspnœa. Almost unconscious. Cannot be made to notice anything or swallow what is put on her lips. Fluids poured into her mouth run out again. Eyes vacant, pupils dilated; jaw fallen, tongue dry and brown. Thoracentesis performed with the assistance of three members of the house-staff. Ninety ounces of clear serum drawn off. During the operation, which lasted about twenty minutes, fifteen or twenty half-drachm doses of whisky were administered hypodermically. In spite of these efforts at stimulation, the pulse, which had before been weak, now disappeared entirely at the wrist. The impulse of the heart

could scarcely be felt over the *præcordia*, and the respirations were shallow and ineffectual, not seeming adequate to the inflation of the lung just relieved from the pressure of the fluid. The condition of the patient was so unpromising that my colleagues of the house-staff, who had been assisting me, were of opinion that she was dying, and that further treatment was useless and even absurd. Expressing themselves to this effect, they left me, giving up the case in their own minds, and taking no further interest in the matter. While I was obliged to admit that the case was hopeless, judged by ordinary standards, and beyond the reach of ordinary stimulants, I could not help feeling that heroic measures were specially indicated. The source of trouble—fluid compressing a lung and displacing the heart—had been removed; if the patient could be stimulated to breathe deeply and profit by its disappearance, there seemed to be good reason to hope for her recovery. Selecting a prominent superficial vein in the radial region, I exposed it by an incision through the skin. I then injected slowly into it a drachm of ammonia solution, taking care that the point of the hypodermic needle was free in the lumen of the vessel. This done, I placed my hand over the patient's heart and waited. In fifteen seconds, I felt a marked increase in the force of pulsation. In about two minutes there was a strong pulse of a hundred, which was plainly perceptible at the wrist. A minute later the patient sighed deeply; the color came back to her lips, her eyes moved and began to show signs of returning intelligence. On being urged, she swallowed without difficulty two ounces of strong egg-nog. After a few deep inspirations, she breathed more regularly and easily; her pulse was strong and tense, ranging between 100 and 110. Half an hour afterward she was perfectly conscious, and reported herself comfortable, though weak. Pulse 90, regular strong. Respirations 26, easy and natural. Swallowed easily and willingly small quantities of egg-nog. During the afternoon and evening, patient continued to improve. Pulse 80—90 and strong, respirations 20—30 and easy. Patient passed a good

night, sleeping most of the time. Was bright and refreshed in the morning.

May 7. Steady improvement since last note. Sat up for two hours to-day, and ate a lamb chop with relish.

May 17. Patient sits up nearly every day, and is gaining strength.

N, B.—Improvement has been uninterrupted since the injection of ammonia. No depression has been observed following the stimulant action of that remedy, nor has there occurred an unpleasant symptom which could be attributed to it.

The case described seems to satisfactorily establish :

1. That the intravenous injection of ammonia is a prompt and powerful means of stimulation, acting efficiently in cases where other measures are of no avail.

2. That no bad effects follow its employment.

While the importance of the above deductions is obvious as a matter of general therapeutic interest, they seem to have a special significance in connection with those operations whose object is the removal of mechanical obstructions to respiration—I mean thoracentesis, and more particularly laryngotomy and tracheotomy. Thoracentesis is not, perhaps, very often an emergency; but laryngotomy and tracheotomy, done in cases of croup, oedema glottidis, etc., generally fail to save life, because performed too late—the patient being too much exhausted to breathe in the air for which a new entrance has been made. Artificial respiration, hypodermics of whisky and ether, cold effusions, etc., are resorted to in vain in many instances—the machinery of life cannot be set in motion again, and the cases die for want of efficient stimulation. Now, would not the intravenous injection of ammonia, in connection with artificial respiration, save many of these patients? It being proved that the treatment is without danger and followed by no bad effect, this question should not long remain unanswered.

In conclusion, I would call attention to the fact that it is not easy to perform intravenous injection through the skin. The

vein collapses under the necessary pressure, and the needle is apt either to stop short and not enter the vessel at all, or to transfix it and direct the injection into the cellular tissue beyond. The only safe method to pursue is to dissect down upon the vein and expose it; the needle may then be carefully introduced until the point is felt free in the interior of the vessel.

ANTISEPTIC TREATMENT IN EXTRACTION OF CATARACT.

PROFESSOR ALFRED GRAEFE, of Halle, has become a convert to the antiseptic treatment in certain cases, and from his experience one is not surprised to see him preaching the propaganda concerning it. Out of one hundred and fourteen operations, for extraction of cataract, he reports an entire loss of only three cases—a result which certainly commends the method to careful consideration.

Moreover, the plan which he adopts is by no means as complicated as Lister's multitudinous bandages. On the day before the operation, besides applying atropine, he washes the entire conjunctiva with a watery solution of carbolic acid, about nine grains to the ounce, (2 per cent.,) and then closing the eye, covers it with a sponge dipped in the same fluid. He is careful that all instruments and other articles coming in contact with the eye are washed in a similar solution.

It is also used for cleansing the globe during and after the operation, and finally a piece of lint moistened in a 4 per cent. solution of boric acid, (xviii grains to the ounce,) having been laid on the lids, the bandage is applied. At each subsequent dressing the same solutions are also used for bathing and dressing the eye, until the wound is firmly closed, and the process of healing far advanced.

The plan is certainly a simple one, and being recommended by so careful and conscientious an observer, will find many to adopt it.

TRANSPLANTATION OF THE CORNEA.

THE literature of this subject is extensive, considering the short time since systematic attempts were first made to accomplish the much desired effect. The experiments of Von Hippel gave an impetus to the study of the operation, which has resulted in a series of excellent articles concerning it by Duerr, Rosmini, Schoeler and others. Their object has been to improve the condition of that large class of unfortunates whose cornea have become opaque, by substituting that of a dog, or other animal. The idea is plausible, and when the apparent difficulties are taken into account, it is remarkable how readily the transplanted portion will adhere in its new situation. The main obstacle to success, however, is the tendency of the engrafted tissue to become subsequently opaque. Several ingenious procedures have been resorted to, with a view to obviate this, by increasing the vascular supply, and thus rendering the nutrition of the part more nearly normal. For example, one operator has adopted a plan about as follows: Around the cornea of the animal, from which the piece is to be taken, a number of small wounds or ulcers are artificially produced. The adjacent conjunctiva being then drawn forward and stretched over these spots, it is retained there by means of sutures, and in a short time becomes permanently adherent. In this way, a circle of growths is formed about the centre of the cornea, each one of them being a veritable pterygium, like that so often seen in the inner angle of the eye. The central, clear portion of cornea, with the attached conjunctiva, is then cut out, and a corresponding piece having been already removed from the diseased human eye, the fragment is secured in its new position by means of several sutures. By this, and by similar procedures, the transplanted portion has frequently been made to attach itself firmly—although, as previously remarked, the piece soon tends to become opaque.

In Prof. Hippel's last contribution on the subject, he reports five cases. One of these proved a complete failure, three could,

recognize large objects like the hand immediately before the eye, and one, for a time, could count fingers at eight inches.

This is not a very brilliant showing, it is true; but when we remember that until now such cases have been considered hopelessly blind, and when we realize further how much each additional ray of light is valued by such unfortunates, it must already be counted as a warrantable operation, as a procedure by which nothing can be lost, but considerable may be gained, and promises in the future to become one of the triumphs of ophthalmic surgery.

TWIN LABORS.

THE following case of twin labor, with both children presenting by an arm, is interesting from the fact of its extreme rarity.

Cazeaux, in his valuable work on Midwifery, does not give an instance of the kind, nor one in which the *first* child assumed this presentation.

In a tabular arrangement of 329 cases of twin labors, he proves, by the absence of such an example, its real interest.

In 329 pregnancies the two children presented as follows :

Both by the Head, 134 times.	1st by Head, 2nd by Breech, 55 times.	Both by Breech, 12 times.	1st by Breech, 2nd by Head, 31 times.
1st by Breech, 2nd by foot, 11 times.	Both by Feet, 8 times.	1st by Feet, 2nd by Head, 29 times.	1st by Breech, 2nd by Elbow, once.
1st by Head, 2nd by Shoulder, 7 times.	1st by Face, 2nd by Head, once.	1st by Feet, 2nd by one hand, once.	1st by Feet, 2nd by Breech, once.

Many other writers fail to mention cases of this character, and otherwise ignore the subject. In regard to the difficulties encountered in turning the first child, it is almost impossible to find anything in treatises upon midwifery.

LATERAL PLANE PRESENTATION.

Dr. Edwin Borck, in the *Obstetric Gazette*, writes: On the 16th day of March, 1879, at 11 o'clock, P. M., I was requested by Mr. G., to bring my obstetrical instruments and see his wife, living at 1633 Lucas street; age, 30 years; American; brunette; very delicate and nervous; mother of three living boys, aged respectively 13, 6 and 3 years; one boy and one girl dead; never aborted, and had been in labor several hours. Mrs. Granne-man, a midwife of Wright street, a very modest and intelligent lady in attendance, who informed me that she had waited upon the patient in her previous labors, that her pains were always very weak and slow, that there had been no progress in this case—pains came regularly, but short and feeble—that there was something wrong, but could not tell what. After tranquilizing the patient by kind words, I found upon vaginal examination that the os was well dilated, membranes protruding and tense; more I could not reach; by manual examination of the abdomen, I felt satisfied that I had to deal with a lateral plane presentation and a very large child. What is the matter? Is anything wrong? were the questions asked.

I gave her one gramme of pot. bromid. to quiet her irritability, console and keep her in good humor, to await the next pain. In a few minutes a very faint pain came on and the membrane ruptured. I hurried to her assistance and found a left hand presenting; in a moment another left hand. I was satisfied now that these were twins, and right and left cephalo-iliac presentation. I pushed the first hand up as far as possible, hunted a leg, which easily came down; the second followed just as easy. Delivery was completed by extension, occiput brachma, face and chin.

Mrs. G. now took charge and cut the cord; after this I saw what was to be done next; putting my left hand upon the abdomen, my right in the vagina, the left hand of child still presenting; again a feeble pain. I pushed upon the arm slightly, a complete spontaneous evolution took place; this child was

delivered in vertex presentation—"left occipito-iliac anterior." Mrs. G. now took charge again; she cut the cord and delivered the placenta with ease. No hemorrhage. One of these female children weighed $7\frac{1}{2}$ pounds, the other 6 pounds and 4 ounces; each had its own placenta, but one common membrane.

Mother and offspring did well; nothing but good nursing was required, which the two received in an excellent manner from the hands of the midwife and nurse.

The points of interest are apparent.

St. Louis, Mo., 3613 N. 9th street.

ON THE DURATION OF LIFE IN THE FŒTUS IN UTERO AFTER THE MOTHER'S DEATH.

THIS question has been carefully investigated by C. Garezky, in his inaugural dissertation, St. Petersburg, 1878. He has collected 379 cases, in which the Cæsarean operation was performed after death; 308 infants were extracted dead, 37 showed signs of life, 34 were born alive; but of these only five remained alive for some time. The author then gives a sketch of Breslau's experiments on animals, and sums up his conclusions as follows: 1. The fœtus undoubtedly survives the sudden death of the mother. 2. If it can be extracted in the course of the first six minutes, it may be born alive. 3. Six to ten minutes after the mother's death, the child may still be alive, though slightly asphyxiated. 4. Ten to twenty minutes after death, the infant is highly asphyxiated. 5. In a great many cases the infants are either highly asphyxiated or dead after the first minute. 6. The shorter the time is which elapses between the cause of the mother's death, and the ceasing of the cardiac action, the longer the fœtus remains alive. 7. If the mother's death has been caused by some quickly acting poison, the chances for the child's life are greater than when it has been brought on by other causes.—*British Medical Journal*, June, 1879.

TREATMENT OF HEMORRHOIDS BY HYPODERMIC INJECTION OF CARBOLIC ACID.

DR. ANDREWS' conclusions from 3,300 cases treated in this way, are :

1. Inject only internal piles.
2. Use diluted forms of the remedy at first, and stronger ones only when these fail.
3. Treat one pile at a time, and allow from four to ten days between the operations.
4. Inject from one to six drops, having smeared the membranes with cosmoline to guard against dripping. Inject very slowly, and keep the needle in place a few moments to allow the fluid to become fixed in the tissues.
5. Confine the patient to bed the first day, and also subsequently, if any severe symptoms appear. Prohibit any but very moderate exercise during the treatment.

With these precautions, he thinks this operation will be of permanent value. The operation is performed in the following way: The pile is exposed to view, and the anus smeared with an ointment, to prevent smarting in case the fluid should chance to drop. The operator then takes a sharp-pointed hypodermic syringe, charged with the carbolized liquid (which has been used in varying strength, from one part of the crystallized acid to thirty of olive oil, or glycerine up to equal parts,) and slowly throws a few drops into one of the piles. The needle is left in the puncture a few moments, to prevent the fluid from running out, and to allow it to become fixed in the tissue. The pile turns white, and in the most successful cases withers away without pain, suppuration, or sloughing.

Only one pile is treated at a time, and about a week is allowed between the sessions. Most of the cases thus operated upon, suffer a sharp, temporary smarting, and a few have a terrible and prolonged agony. The majority are cured, however, without interrupting the patient's business.—*Chicago Medical Journal*.

BATTERY FLUID.

DR. TILLEY, in the *Chicago Medical Journal and Examiner*, makes public a device by which the constancy of the galvanic current may be increased and the necessity of frequently re-amalgamating the zincs avoided. The idea is not original with him, but it is not generally known, and any device which will dispense with the necessity of amalgamating the zincs, will be a great source of satisfaction to the majority of physicians. To accomplish this it is necessary only to add a certain quantity of bisulphate of mercury to the ordinary battery fluid. The amount given by Gaiffé, of Paris, is four or five grammes of the bisulphate of mercury to the liter of the regular sulphuric acid and bichromate fluid. Of course it is necessary to amalgamate the zincs before commencing its use. They will then remain amalgamated. The marked improvement in the constancy of the current obtained, and the avoidance of the troublesome process of reamalgamating the zincs, makes this hint a valuable one to all physicians using batteries.

THE DIPHTHERITIC POISON.

A SINGULAR instance of the vitality of the poison of diphtheria is reported in the *Vrats Chebnyia Vedomosti*. A gentleman in the South of Russia, four years ago, lost a boy from diphtheria. A family vault having recently been constructed, the coffin of the boy was transferred thither.

Before it was lowered down into the vault, the father wished to look at the body, having entertained a suspicion that the child had been buried alive.

An opening was accordingly made in the lid of the coffin, and the whole family, including five children, looked in. The next day *all* of the children were ill with diphtheria, and one of them has since died.

TREATMENT OF ACNE.

THE treatment of acne punctata, with glycerine and sulphur, as first proposed by Mr. Erasmus Wilson, is endorsed by Dr.

J. G. Parsons, in the *British Medical Journal*. He thinks, however, that a far more efficacious way of applying the sulphur, is to dust it upon the face every night, using an ordinary puff. The sulphur may be perfumed with a drop or two of Otto Rose. This will often effect a cure in one or two weeks.

FOR CONSTIPATION.

BUCKTHORN, *rhamnus frangula*, is a favorite and useful remedy with the profession as a cathartic and laxative, especially in combination with other remedies. From repeated trials we obtain a better effect from *rhamnus purshiana*, or *cascara sagrada*, in the form of the fluid extract. An excellent combination, in constipation depending upon an atonic condition of the alimentary canal, is the following :

℞ Fl. Ext. *Cascara Sagrada*, ℥i.
Ext. Malt.
Syr. Simp. aa ad ℥iv.
M. S. ℥i, ter in die.

TREATMENT OF INGROWN TOE-NAIL.

DR. JAMES McEVOY says, in the *Louisville Medical News*, that he has found the following simple plan effective :

A small wedge-shaped piece of sponge tent is cut and inserted under the ingrown part of the nail as far as possible. The size of the sponge is increased at each insertion, which is generally every third day. If there is a foetid discharge the sponge is dipped in carbolized oil before using.

In the *Chicago Medical Journal and Examiner*, Dr. Andrews gives the following operation as that of a chiropodist named Willard: He neither extracts the nail nor slices off the overlapping flesh, but cuts out a narrow ellipse of tissue near the nail and parallel to its border, claiming that the border itself where it rests against the edge of the nail has its special structure adapted to its location, and ought not to be sacrificed. The removal of the strip of flesh being accomplished, he brings the edges of the wound together with fine sutures, thus drawing the border away from the nail and effecting a cure.

JABORANDI IN THE TREATMENT OF MUMPS.

DR. TESTA reports five cases of mumps treated with jaborandi. After free perspiration and salivation, there was a marked amelioration of the symptoms and the patients desired food. Next day the parotid swelling was much reduced, and in two days more the cure was complete. Dr. Testa thinks jaborandi acts by its hydragogue properties, that it may shorten the disease and prevent metastasis—*Four. des. Sci. Med.*

ENDERMIC USE OF MORPHIA BY "THIMBLE BLISTERING."

DR. WATSON, in *Va. Medical Monthly*, describes a simple and sometimes very useful method of using morphia, whereby he claims that all danger is avoided and the annoying and sometimes even distressing symptoms which so frequently follow the use of opium, or its preparations, are escaped.

An ordinary sewing thimble, a little loosely picked up raw cotton, enough aqua ammonia (strong) to saturate cotton without running out, are the preliminary agents required. Gently press the thimble over the selected spot, until sensation of heat has been felt for 2 or 3 minutes—wipe away any ammonia which may remain on the surface—now with the finger rub away the superficial skin, apply dry morphia, by at first gently rubbing on, then carefully adding a drop of water. A small quantity may be repeated at short intervals until your patient feels its effects, or is satisfied with the relief obtained. The excess of morphia may then be wiped away. The author has used this method in about 100 cases with entire satisfaction.

POISONING BY SODIUM SALICYLATE.

DR. FELTZ reports an interesting case, illustrating the toxic effects of sodium salicylate used continuously for several weeks, in quantity amounting to one and a half, and finally two drachms daily.

The total amount taken was about six and a half ounces. The toxic symptoms were principally, frequent vomiting, and

repeated attacks of very painful headache, preceded by reddening of the neck, face and head. The pupils were much contracted and the symptoms continued for seventeen days after the last dose was taken, while the acid could be detected in the urine for sixteen days.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, July 1st, 1879.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

THE members present were Drs. Keene, Trowbridge, White, Bartlett, Cary, Mynter, Hauenstein, Barnes, Moody, and Fowler. Dr. Fowler acted as Secretary.

The application of Dr. Davidson for membership having been received, the Association listened to the reading of an interesting paper by Dr. Charles Cary, on the "Support of the Perineum," of which the following is a brief abstract :

The subject I have chosen to bring up for discussion this evening, has not the virtue of novelty, but is as old as scientific midwifery itself.

It has been fully written up, various views have been maintained and abandoned, but still room sufficient is left for improvement in the present management of the perineum during labor. I may go even further, and add that I consider the support as ordinarily given, useless, if not harmful, and is a procedure to which might aptly be applied the term of meddlesome midwifery. In attacking a practice which is so general as almost to be universal, I am fully aware of the opposition which will be brought forward, and it is perhaps somewhat for that reason that I have taken this subject; being fully convinced that the friendly discussion which follows such a paper is oftentimes far

more beneficial to us all than the mere paper itself. In questioning some of our best practitioners in this city, I have not found one who disapproves of the ordinary method of support. And yet physicians who pretend to follow the plan proposed by Vealpeau and by Cazeaux, nevertheless, at the very moment when least demanded—at the time when pains are hard and the entire perineum is protruding, being pressed out by the head, many physicians undertake to slip the posterior fourchette over the child's head, by pushing it backwards. It is a temptation that many do not resist. They "crown" the child, as it is called, just when on the contrary every effort should be made to prevent the act.

Dr. Cary then quoted at length from the works of Ramsbotham, whose strongly favored support; from Tyler Smith, Dr. Churchill, and Dr. Meadows, who advised it only under certain circumstances or were indifferent regarding it; and from Dr. Grailey Hewitt, who says vehemently: "It is unnecessary or mischievous." Leishman, whose views are generally admitted as being of the highest grade, says that he has carefully considered the opinions of others, and thoroughly observed the process in nature, and has been led to condemn support of the perineum as *irrational* and *useless* in all cases, and undoubtedly hurtful in some.

Having given you the means recommended by the various authors, I have plainly shown, I think, that we are at liberty to act as we best see fit, and in any case are re-enforced by authority. The earlier writers recommended merely the free use of lubricants and emollients, and from these simple means we can go even to the other extreme, and apply a fixed point d'appui, as recommended by Ramsbotham. Another point which all authors make, without exception, is that even with the means they advise, rupture will sometimes occur despite their act. Now, what is the only just conclusion to draw from this last statement? It is this: that where rupture occurs from the conformation of the female part, it will not be prevented by the means ad-

vised, if these means are applied to every case. If it is due to a too rapid labor or surprising of the perineum, it will not be prevented by the means advised, but the accoucheur should devote himself to retarding the labor.

If it be owing to the fact that the head is small, and does not undergo flexion, but on the contrary, is rapidly pushed through the parturient canal without assuming the proper position, the means indicated are undoubtedly to correct the position of the child's head. In this same manner I might review the long list of causes, as given by a number of writers, and suggest a different plan of prevention for each individual cause. This, then, should convince us that no one method is to answer in every case, and that the accoucheur who applies his means to suit the individual case, and who is adroit in detecting the danger, is the one in whose hands the lying-in woman will be most secure.

DISCUSSION.

Dr. Bartlett thought that a clear understanding of the causes which operate to produce rupture often indicate how we can avoid it. He considered the use of ergot a frequent one, and employed it with caution. In a modified way he favored support.

Dr. White said he wished to thank his young friend for bringing forward a subject so important. In the few minutes allotted to the discussion he could hardly do justice to the topic. Where the support was skillfully applied, he thought it could never do harm, and was often of the greatest value. Its object should be to keep the child's head in contact with its sternum, which is readily accomplished by passing the finger around the vertex, and at the same time pushing the chin upwards. The treatment, however, must of course vary somewhat in each instance. For many years he had been in the habit of making a slight incision down and outwards, on each side of the raphe, wherever a rupture was imminent. This is easily done with a pair of scissors, and if made during a pain, is hardly noticed by the patient. He did not remember having seen it resorted to

until after he had practiced it himself. As a proof of the advantages of this method, an instance was cited of a woman forty-five years old, who went safely through an instrumental delivery after two lateral incisions had been made; and in another case, apparently better able to withstand the accident, but otherwise like the first, the perineum was ruptured extensively.

Dr. Mynter did not think the operation proposed by Dr. White was a new one. He had seen it made in Europe ten years before.

Dr. White said he had practiced the method fully twenty-five years.

Under voluntary communications, Dr. Mynter reported a curious case in which it was necessary to amputate the enlarged toe of a child, whose mother, when far advanced in pregnancy, had suffered from an ingrowing nail on the corresponding toe of her foot. After a brief discussion of the possible nervous connection between mother and child, the meeting adjourned.

EDITORIAL.

THE SANITARY CONDITION OF BUFFALO.

THE importance of observing, and if possible controlling the causes which produce sickness and excessive mortality, has always been recognized by the profession, and the JOURNAL will speak with no uncertain sound upon such topics as are connected with the health and well-being of the community. One of the hopeful signs of the times is the widely extended interest in public health questions, and the organization of competent sources of advice and authority in matters affecting the protection of life and health. The movement is but in its infancy, but the influence of all well directed efforts for promoting sanitary knowledge and its application, takes hold upon the highest

interests of mankind, and will, in the advancing civilization and higher culture of communities, become more and more a matter of organized and wise administration.

The publication, by the National Board of Health, of mortality statistics from the chief cities of the world, is an important step in this direction. Their report shows not only the annual death rate per 1000 in each city, but also the number of deaths resulting from the principal diseases thereby, giving much valuable information to the sanitarian and vital statistician.

We note, with regret, the series of blanks usually found after the name of Buffalo in these reports. The value of such statistical knowledge is largely dependent upon their completeness.

In our present issue we give a mortality table, condensed from the reports in the National Board of Health Bulletin, and we propose to continue them in the future. We trust that reports from Buffalo will regularly appear, and we have reason to believe that the comparison would be highly favorable to our own city. Certainly the natural advantages which Buffalo possesses would place it at the head of the list if proper sanitary regulations are enforced.

It is to the physicians that we must chiefly look, to make the knowledge of sanitary science, possessed by the educated, serviceable to the protection of the people—and in this duty the members of the Buffalo Medical Association have not been behind their professional brethren of other cities. At the last meeting of the American Medical Association, Prof. T. F. Rochester read a paper on the "Limitation and Prevention of Epidemic Diseases," which attracted much favorable attention.

The paper has been reported in full in many of our best medical journals, and is looked upon as a valuable contribution to the medical and sanitary literature of the day.

At a late meeting of the Buffalo Medical Association, a paper was read by Dr. A. R. Davidson on the "Sanitary Chemistry of Water," which is of peculiar interest to us, as a large part of it

was devoted to the water supply of our own city. As the paper was published in full in the daily press, it will not be necessary to give it a place in our columns, but we desire to call attention to a few of the points therein presented :

That many of our city wells are contaminated, and that much sickness is dependent upon the use of impure water has been a fact recognized by the practical experience of all of our physicians. The marked diminution of disease, since the introduction of pure Niagara water—on the completion of the tunnel—has also been generally admitted. But a considerable portion of our city is not, as yet, supplied with Niagara water, and it is in that part of the city that Dr. Davidson most often finds the water of the wells bad, and sometimes so *horribly bad* as to indicate direct connection with leaky sewer and privy vault.

That such a condition of things should be allowed to remain uncorrected is shameful. If the wealthier portion of the city had to depend upon such a water supply, no time would be lost in taking measures to obtain a pure water at any cost ; but, as the districts dependent upon these wells are populated chiefly by the poor and laboring classes, who cannot afford to pay for Niagara water, the question of what to do ? seems to have given our City Fathers much trouble to decide. At a late meeting of the Common Council, however, action was taken, which gives some promise of relief, and we hope soon to be able to chronicle the fact that an abundant supply of pure water is within the reach of every citizen of Buffalo.

At the July meeting of the Buffalo Medical Association, Prof. James P. White called attention to the filthy condition of many of the public streets—a condition which is by no means improved by the practice of sprinkling.

The passage of the sprinkling cart, while it “lays the dust,” makes mud which is equally annoying to the pedestrian.

Dr. White’s objections were, however, taken from a sanitary point of view. He considered that the rapid decomposition of the heterogeneous materials, which go to make up street mud, produce

an unhealthy condition of the atmosphere, and was injurious to the public health. However that may be, the plan proposed to correct the trouble is one that will commend itself to every sensible mind. It was that the streets should be clean, and kept clean, by the constant application of the street cleaner's broom, and he insists that the expense of keeping the streets perfectly clean in this way will not exceed the cost of sprinkling. In view of the importance of the subject, to which the Doctor had called attention, a special committee was appointed by the Association to investigate and report at a subsequent meeting.

MORTALITY TABLE.

Condensed from National Board of Health Bulletin, for the four weeks, ending August 2d, 1879.

CITIES.	Estimated Population.	Deaths.	Death rate per 1000.
BALTIMORE, - - - - -	400,000	733	23.55
BOSTON, - - - - -	365,000	601	21.40
BUFFALO, - - - - -	170,000	†—	—
CHICAGO, - - - - -	460,000	960	27.13
CLEVELAND, - - - - -	160,000	338	27.43
LOUISVILLE, - - - - -	175,000	228	16.94
NEW YORK, - - - - -	1,097,000	2779	32.90
PHILADELPHIA, - - - - -	901,000	1580	22.78
ROCHESTER, - - - - -	90,000	*132	17.6
ST. LOUIS, - - - - -	500,000	692	17.99

* For the month of July, 1879.

† No report furnished by Nat. B'd of Health.

THE demand for copies of the initial number of the present volume of the JOURNAL, has been so greatly in excess of our expectations, that we have been compelled to refuse many

applications. The present edition is nearly double that of the previous volume. We hope to supply all demands for specimen copies of this number. Subscribers desiring a complete file of the present volume, must make early application for the August issue.

With this number we enclose bills for the current year, and we ask a prompt response. It is our aim to make the JOURNAL a necessity to every educated physician in Western New York, and also a welcome visitor to the profession in other sections. But we must remind our patrons that the subscription price given has been reduced to so low a figure that the JOURNAL can be successfully conducted only upon the *cash principle*. We are especially gratified with the favorable reception, so generously bestowed by the profession upon our August number. The present and future numbers will deserve, we trust, a yet more favorable opinion.

REVIEWS.

On Diseases of the Stomach; the Varieties of Dyspepsia, their Diagnosis and Treatment. By S. O. HABERSHON, M. D., F. R. C. P., &c. Third Edition. Philadelphia: Lindsay & Blakiston. 1879.

The writer is well known as an author, a number of other works treating upon similar subjects being before the public. The present work is quite comprehensive, and contains much that proves the subject to have been thoroughly studied. It is divided into twenty chapters upon nearly as many varieties of dyspepsia. This rather extreme classification gives the impression of diffuseness, and we are inclined to think this its weakest point. Compared with a work upon a similar subject (and a model in its way), viz: Chambers' on Indigestion, it is less happy in its style and hardly equal to it in clearness of logical deductions. On the other hand, it covers a wider field and is based on broader principles.

In proof of this latter assertion, we quote a paragraph contained in Chapter III, on the General Sympathy of the Stomach in Disease. The author says: "It is the tendency of the clinical study of any isolated class of disease, or of the affections of any particular organ, to exclude the consideration of other portions of the body, as if one part could be separated from the other. The nervous system is so connected with every individual structure that it sympathizes with changes in any of them, and may be thrown into a state of general disturbance by a comparatively trifling injury. * * * With sympathies so widely pervading the whole system, it is not surprising that gastric diseases should present most varied indications in the disturbance of other organs; and, in like manner, that gastric phenomena of an abnormal kind should result from irritation, far removed from the stomach itself. The closest circumspection is required to distinguish between sympathetic affections and those of strictly local origin."

V. P.

Manual of the Principles and Practice of Operative Surgery. By STEPHEN SMITH, M. D. Boston: Houghton, Osgood & Co. New York: 21 Astor Place The Riverside Press, Cambridge. 1879.

This book contains 662 pages, with numerous illustrations—733 in all—and is an enlargement of the author's hand-book of "Surgical Operations," edited 1862, including the general operations of surgery in civil practice, while the former was designed more for military practice. It contains a great deal of useful information, which is generally spread over a great many books, mentions all the latest improvements in operative surgery, and will, without doubt, be of service to the profession, as a short record of the state of surgery at the present time. The language is clear and distinct, but every subject is treated so briefly that it will scarcely be of great use to the student. It is of more value for the experienced physician, who has little time for study and less money to buy larger surgical works, but who yet wishes to know something of the progress of the science. He

will, in this book, find the latest and best methods of performing any operation, from venesection to ovariectomy, and as a book of reference for him we recommend it most heartily. The illustrations are, on the whole, excellent; a great many of them, however, so reduced in size as to be almost of no use. M.

A Clinical Treatise on the Diseases of the Nervous System. By M. ROSENTHAL, Professor of Diseases of the Nervous System at Vienna. With a preface by Professor CHARCOT. Translated by L. PUTZEL, M.D. New York: William Wood & Co.

This is volume seven of Wood's Library of standard medical authors, and is the most valuable of the series. The author divides the work into three classes. Class I, includes diseases of the meninges and parenchyma of the brain. Class II, diseases of the medulla oblongata. Class III, diseases of the meninges and parenchyma of the spinal cord.

The discussion of each subject is concise and clear. The author, besides referring to the pathological anatomy, symptomatology, etiology of the diseases under consideration, illustrates with clinical notes of interesting cases, the prominent features of each, and thus gives a practical treatise of essential service to those members of the profession who are unable to examine the larger works. We commend this volume to the favorable notice of our readers. L.

Pocket Therapeutics and Dose Book. By MORSE STEWART, JR., B. A., M. D. Second Edition. Detroit, Mich.: Geo. D. Stewart. Price, Cloth, \$1.00.

This little book is intended to serve as a *reminder*, to be referred to in emergencies and in cases of doubt. It is stated to contain a classification and explanation of the action of medicines; minimum and maximum doses in troy weights, with their equivalent in the metric weights; index and definition of diseases, with appropriate remedies; index of common and pharmaceutical names; classification of symptoms; poisons and their antidotes; and useful hints to the prescriber. It is small enough

to be carried in the pocket, and those in need of such a companion for the purpose of refreshing their memory, will find it very convenient. D.

Memoranda of Poisons. By THOMAS H. TANNER, M. D., F. L. S. Fourth American, from the Last London Enlarged and Revised Edition. Philadelphia: Lindsay & Blakiston. Buffalo: T. H. Butler.

Dr. Tanner's writings are all thoroughly practical, and we have here a small but practically complete manual of Toxicology for the use of the practitioner and student. This new edition has been carefully revised, and much new matter added, and the typographical arrangement is such as to show at a glance the treatment to be adopted in each particular case of poisoning to which a medical man is liable to be summoned. D.

Public Health. A new weekly Journal devoted to the dissemination of Sanitary Knowledge and the Preservation of Health.

It is published by Dr. Edward I. Birmingham, the well-known editor of the *Hospital Gazette* who has secured the co-operation of some of the leading sanitarians in the country. We believe with the editor, that a weekly sanitary journal, properly conducted (and Dr. Birmingham's connection with it ensures that) will meet with sufficient encouragement and support to ensure its permanency. We wish the new journal God-speed in its effort to awaken interest in sanitary matters, and we hope there will be a demand for *Public Health* by every enlightened member of the community. D.

Long Life and How to Reach It. American Health Primers Series. Philadelphia: Lindsay & Blakiston. Buffalo: J. H. Butler.

The volume is from the pen of Joseph G. Richardson, M. D., and contains many of the plain, common-sense maxims in regard to fresh air, proper food and drink, etc., which cannot be too forcibly impressed on the minds of people at large. These primers are gotten up in neat style and compact form, and, if people will but read and properly digest their contents, they may be of use in the community. M.

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

PERITYPHLITIC ABSCESS.*

BY HERMAN MYNTER, M. D.

A FEW months ago, Dr. E. R. Barnes read an able paper before the Buffalo Medical Club, on perityphlitic abscess and its surgical treatment, as advocated by the late Dr. Gurdon Buck, of New York. My attention was further directed to this subject by a case of perityphlitic abscess in my own practice that terminated favorably by adopting the treatment therein advocated. As very few had the opportunity to hear Dr. Barnes' paper, and as, in my opinion, this treatment ought to be studied and known by the profession generally, I take the liberty to present it to you this evening.

The terms typhlitis and perityphlitis,† the former signifying inflammation of the wall of the cæcum, the latter, inflammation in the tissues surrounding the cæcum, are generally applied to those cases in which there is perforation of the cæcum or the appendix vermiformis, and in which there occurs either acute

* Read before the Buffalo Medical Association, September 2, 1873.

† Bristowe, page 67.

peritonitis, or, provided the perforation takes place slowly, a local suppuration. Strictly speaking, the name is not a good one. It has been used to signify almost every variety of inflammation in the right iliac region. Bristowe believes that the majority of perforations occur in the appendix vermiformis, and sometimes in the cæcum itself, or the abscess takes its origin outside the wall of the cæcum. In a large and very valuable treatise on peritonitis from perforation of appendix vermiformis, by Professor With, of the University of Copenhagen, lately published, the author takes the same position. He calls these inflammations peritonitis appendicularis, on account of their origin from perforation of the appendix vermiformis sive appendicularis. Whatever may be the origin, we have a deeply-seated inflammation in the right iléo-cæcal region, often terminating in an abscess. The several writers make no difference in the symptoms of these abscesses, whether, on the one hand, they come from perforation of the appendix vermiformis or the cæcum, or, on the other, from perforation of that part of the ascending colon which is not covered with the peritoneum, or take their origin in the loose cellular tissue behind the cæcum or colon without perforation. My personal belief, on account of the anatomical relations, is, that there is some difference in the objective symptoms, as the abscess in one case is intraperitoneal, certainly for a time, in the other, extraperitoneal; being extraperitoneal, it will with greater facility extend downward in the loose cellular tissue behind the peritoneum.

Perityphlitis, to use that expression, is a very dangerous and not uncommon disease. According to Bristowe, it occurs after long-continued distension, or from ulceration, which so frequently attends distensions. Sometimes it may be caused by a simple perforating ulcer, or by the irritation and inflammation kept up by a foreign body; it may follow dysentery, typhoid fever, tuberculosis, or cancer; it may take its origin outside the cæcum or colon, either without any known cause (then often called rheumatic peritonitis), or on account of the inflam-

mation extending to this spot from neighboring organs, as the liver, pleura, kidney, etc. If the abscess is the result of a perforation, we may find foreign substances, gallstones for instance, in the matter discharged. In thirteen cases published by Dr. Gurdon Buck, seven of them were from this cause, the foreign bodies consisting of fecal or calcareous matter from the size of a split pea to that of a date pit. In one case, eight or nine concretions were discharged through the incised wound. There can be no doubt that there is perforation of either cæcum or appendix vermiformis, when we find such fecal matter, and their frequency shows that the majority of these abscesses come from perforation. The abscesses often contain fetid smelling gases, as do all abscesses near the intestines. Perforation may take place directly into the peritoneal cavity, giving origin to a violent and fatally terminating peritonitis, or, if adhesions have taken place, resulting in an intra-peritoneal abscess, walled in by adhesions. Such an abscess may again perforate the peritoneal cavity, or contiguous organs, as the colon, rectum, small intestines, bladder; or it may point towards the surface and, if no artificial opening is made, perforate in the iliac region. It may also perforate posteriorly; the abscess is then found in the loose cellular tissue behind the cæcum and ascending colon, although, I think, in such cases the abscess would be either the result of a rheumatic peritonitis, or of an inflammation in the neighboring organs. In this loose cellular tissue, the abscess may extend downwards to Poupart's ligament; behind it is found the strong iliac fascia, covering ileo-psoas muscle and crural nerve. This fascia will prevent the abscess from attacking the ileo-psoas muscle. The iliac fascia, as you remember, is adherent to Poupart's ligament in its whole length, except at the canalis cruralis, where the ligament goes in front of the vessels, the fascia behind. We have, therefore, here an opening through which an abscess coming down between the iliac fascia and the peritoneum, may appear on the femur and seek the surface.

A second direction such an abscess may take is down in the pelvis, and out through the apertura pyriformis. Lastly, the abscess may extend forwards in the loose cellular tissue between the bladder and the abdominal wall, and may here spread upwards towards the navel in the space between the plicae epigastricæ, or perforate into the bladder, or go through the inguinal canal down in the scrotum.

In regard to sex: ten of the cases gathered by Dr. Gurdon Buck were males and three females; of thirty patients, seen by Dr. With, twenty-three were males and seven females; my patient was a male. Of the forty-four here reported thirty-four were males, and ten females. The ages were different: below ten years of age, two; from ten to twenty years, ten; from twenty to thirty, fourteen; from thirty to forty, ten; from forty to fifty, eight.

The symptoms of perityphlitis are simply those of local and universal peritonitis. If perforation of appendix vermiformis takes place without adhesions having been formed, we shall often be unable to determine what the matter was before we make the post-mortem examination.

Numerous cases are on record, in which persons seemingly enjoying perfect health have been taken suddenly ill with universal peritonitis, and in which the post-mortem examination showed perforation of the processus vermiformis. In the cases where a local abscess is formed near the cæcum, the trouble may commence very suddenly with a chill and rigor, vomiting, accompanied with a deep-seated pain and tenderness in the right iliac region. Very soon a distinct fullness is felt here, and percussion may become dull. The fever is continuous, or slightly remittent, with exacerbations in the evening, but does not seem to reach a very high temperature. In the case treated by me the fever was generally 102 in the evening, 100 to 101 in the morning, and the pulse about 100. The pains and tenderness subside after a few days, and are only felt in the right iliac region, while at the commencement a soreness extends over the whole abdomen. The patients often com-

plain of a feeling of deadness, and of slight œdema of the right leg, all resulting from pressure on the nerves and veins. Sometimes, especially in cases of universal peritonitis, the patients complain of dysuria, which may increase to perfect retention of the urine; jaundice also may occur. During the progress of the abscess the patient feels more and more prostrated; the fever continues, the fullness is more and more obvious, but fluctuation is very seldom felt early, only twice in the fourteen cases operated upon. The abscess may change its place, coming nearer and nearer to Poupart's ligament, the skin may become infiltrated and adherent, and at last fluctuation may be felt directly under the skin.

These inflammations, however, do not always give such serious symptoms or progress so far. It is often found that patients, suffering from such an abscess, formerly have had similar symptoms, which lasted only a few days and disappeared by rest and appropriate treatment, especially by the administration of opium. Professor With, in the treatise mentioned above, calls attention to these seemingly insignificant symptoms, and says that he has no doubt that these slight attacks of pain in the right iliac region, which are often treated as colics, very often indicate one of the most serious diseases, so much the more dangerous, as it may very often be misjudged in the commencement, when it is still possible to arrest it, or it may rapidly terminate in a universal peritonitis even in the healthiest and strongest subjects. That such slight attacks of inflammation around the processus vermiformis do occur frequently, more frequently indeed than is generally believed, is shown by the statistical examinations of another Danish physician, Dr. Toft, referred to in Professor With's treatise. In 300 post-mortem examinations he found the processus vermiformis normal 190 times, while it was more or less diseased 110 times, or showed traces of previous disease; therefore, Professor With says, in more than one-third of all corpses we may expect to find traces of disease of appendix vermiformis, while it is probable that they should have given

some symptoms during life. Prof. With himself mentions one case in which adhesions and cicatricial tissue were found around the processus vermiformis by a post-mortem examination, which could be traced to a previous attack of perityphitis. He thinks, therefore, and his opinion is based upon a large hospital experience, that there is a gradual transition from the slight attacks, with pain and local symptoms of peritonitis, through the more or less severe forms to the fatally terminating peritonitis, from perforation of the processus vermiformis. It is the same disease in its different phases, which may be still more plainly shown by the fact that often slight attacks become, by injudicious use of cathartics, or by other injuries, the severe and fatal cases.

Professor With divides his cases, thirty in all, into three classes, each of which he considers as a stadium of the same disease, although they differ clinically very much. The first stadium he calls the adhesive, *peritonitis appendicularis adhesiva*, when the ulceration progresses so far that the peritoneum is attacked and adhesions are formed. The second stadium, *peritonitis appendicularis localis*, is characterized by local peritonitis and primary abscess.

The third stadium is *peritonitis appendicularis universalis*, when we have diffuse peritonitis by perforation into the peritoneal cavity. Of cases of universal peritonitis he has seen and treated fourteen, of which twelve died and two recovered; eleven were males, and three females, the ages ranging between seventeen and forty-two years. In three of these cases there had (respectively two, three and ten years ago) formerly been symptoms of local peritonitis. The disease commenced suddenly in twelve of the fourteen cases, without previous admonition; in six of these it commenced as a local peritonitis, which afterwards became universal. The duration of the local stadium varied from four to fourteen days; of the universal, from two to six days.

The second stadium, *peritonitis appendicularis localis*, is represented in Professor With's treatise partly by six of the already mentioned fourteen cases of universal peritonitis, in which the

disease commenced as a local peritonitis, afterwards becoming universal; partly by sixteen other cases, all of which recovered. In one of these he was able three years afterwards, when the patient died of some other disease, to show traces of perforation of the appendix vermiformis. To this stadium belong the thirteen cases mentioned by Dr. Gurdon Buck, and also the case I treated. Nine of the sixteen cases treated by With had suffered formerly from one or more similar attacks of shorter duration, as also had my patient.

In eight of With's sixteen cases, in which the symptoms were lighter, he found pain and resistance in the right iliac region, but besides that the abdomen was normal. In the other more severe eight cases, the whole abdomen was more or less painful and distended, but especially painful in the right iliac region. In five cases a smaller tumor was felt, in five others a larger; all patients had generally high fever, with remissions in the morning, coated tongue, vomiting, no appetite and were sleepless.

Professor With calls those cases, in which the ulceration in the appendix vermiformis goes so deep that the peritoneal covering is affected, *peritonitis appendicularis adhæsiva*. He acknowledges that we cannot fix the diagnosis in these cases with absolute certainty; but, as he says, there are signs and warnings that one of the most dangerous diseases is developing, and if we do not take heed we may, in a few hours, have to treat a case of universal peritonitis. The symptoms, he says, may be studied in those cases which died either of universal peritonitis or had a local abscess, but formerly presented lighter, but similar symptoms. Nine of the sixteen cases formerly experienced attacks, either of a similar nature, more or less severe, or else had symptoms of some local trouble in the right iliac region. Therefore, he says, whatever may be the connection between these symptoms and our adhesive peritonitis, and although we must acknowledge that we can scarcely consider them all as the result of this, it is a fact that those symptoms are often found in patients, who afterwards have a perforation of the processus vermiformis; that

they may precede the perforation but a short time, sometimes immediately, and that it would be foolish to ignore them, if we cannot give a sure proof that they are the direct result of the disease. Even if the patient has made a mistake in his diet, and the case is similar to that of a simple catarrh of the bowels, we must be suspicious if the pains are severe, attended with a little soreness and tension in the ileo-cæcal region, and perhaps a little vomiting; and we must remember that a mistake in the diagnosis and treatment may be fatal, while a treatment with that possibility in view is without danger, and always alleviates the symptoms.

If we now consider the *diagnosis*, then this is not generally difficult, if we have the possibility of a perforation of the processus vermiformis in our mind. It may look like a simple colic or like a gallstone colic, especially if the pains commenced in the upper and right part of the abdomen and extend inwards toward the umbilicus and accompanied with vomiting. But we shall soon discover that the attacks of pain are continuous, with but few and short remissions; that the soreness is most pronounced in the ileo-cæcal region; that the vomited matter is of greenish color, and that a tumor or a resistance will be felt in the iliac region; the fever, dysuria and pains in the right leg also are important diagnostic signs. If the patient be a female, we may think of metritis, parametritis and the different local diseases which may be found around the uterus during menstruation. Most difficult is, after With, the differential diagnosis of typhlitis stercoracea, and peritonitis appendicularis; the former develops more slowly with slight constipation, flatulence and a painless movable tumor, which is more in the direction of the cæcum and ascending colon; there is also a tendency to ileus.

If perforation of the cæcum occurs afterwards, we shall get a secondary perityphlitis with abscess in the iliac fossa, which has a deeper position, being behind the cæcum, and may extend downwards with greater facility on account of its position in the loose cellular tissue behind the peritoneum.

We now come to consider the most important subject—the treatment of these troubles. Here the course advocated by Professor With is just as important as that advocated by Dr. Gurdon Buck, or perhaps more important, inasmuch if we follow it we shall have less opportunity of resorting to Gurdon Buck's operation. With's treatment is told in a few words: no cathartics at all, absolute rest, opium, leeches, poultice and fluid diet. He warns most decidedly against the use of cathartics, and points out that the twelve patients who died of universal peritonitis had all been treated at home with castor oil or clysmata, while of the two patients who had universal peritonitis, but recovered, cathartics were not used at all in one case, while in the other, a single dose of castor oil was administered at home, which augmented considerably the pain. Of fourteen other cases with local peritonitis, eleven were treated in the hospital without cathartics or clysmata, and they all recovered in an average of twenty-one days, while the disease lasted much longer in three cases, in which cathartics had been used. He first allows their use when all local symptoms have completely disappeared, and there is no danger of peristaltic movements loosening the adhesions. He seeks to avoid spontaneous movement of the bowels and peristaltic movement by the use of opium, advising ten to twenty drops of tincture of opium three times a day or oftener. Leeches, a light poultice, absolute rest, and a strict diet of iced milk, tea and thin oatmeal gruel, comprise the treatment.

In light cases the pain disappears by this treatment in five or six days, and after ten days the opium is discontinued, and the bowels will then move spontaneously in a few days. In more severe cases, he keeps his patients constipated till all local symptoms have disappeared. This generally occurs in about fourteen days. He uses the opium a few days longer, and after its discontinuance, spontaneous movement will soon occur, or, if there is tenesmus, by aid of an injection. Twenty-four days is the longest time he has kept his patients constipated, and he assures us that they suffer no inconvenience from it. If, in spite

of the treatment, the abscess should progress and become superficial, and fluctuation be felt, incision is indicated.

Professor With's treatise, I regret, is written in a language understood by very few of the profession. It contains such a vast amount of valuable information in regard to this disease that it ought to become the common property of the profession. If we now compare the above with the treatment advocated by Dr. Gurdon Buck and supported by thirteen, or, by including my case, fourteen cases (there may be many more, but I have not been able to find them), we will observe a marked difference. He uses leeches and poultice, but he advises five to ten grains of calomel, to be followed by castor oil, and thereafter opium in such quantity as to maintain a moderate state of narcotism. After the lapse of one week, if there is no clear indication of resolution going on, he advises the operation without waiting for fluctuation. In the two cases which he himself treated, the pain increased after cathartics, and the patients felt worse. In the other eleven cases there is no record referring to the use of cathartics. In my case, the patient had taken a large dose of salts the day previous to his attack. He did not take any cathartics the first three days, but on the fourth small doses of castor oil and injection of catnip tea, as he was very much oppressed. The cathartic did not relieve him, and the fever increased. All fourteen cases were very severe.

The *operation* is performed in two ways. Parker's method consists in an incision from three to six inches in length across the tumor a little above and parallel with Poupart's ligament. The skin and subjacent tendinous and muscular layers are divided till the transversalis fascia is exposed. An exploring needle, or the trocar of an aspirator, is then inserted in search of matter, and when this is found, a free incision is made with the trocar as a guide. In two cases, after the exposure of the transversalis fascia, the wound was dressed open, and a spontaneous opening was formed on the second and third day.

Gurdon Buck's method is different. He does not make any incision, but inserts a sharp-pointed canula, after having, at most, first perforated the skin with a tenotome, and having found matter, he enlarges the puncture with the knife sufficiently to afford free outlet for the contents of the abscess, the canula acting as guide for the knife. He chooses the most prominent point of the tumor for the puncture, and considers it harmless, even if he should penetrate the intestines. In case of a failure to reach the collection of pus by a first attempt, a second introduction may be safely tried at another selected spot. By this method, he asserts, the subsequent liability to a hernial protrusion is prevented. The time, at which the operation has been performed in fourteen cases, was: seventh day, two cases; eighth day, one case, tenth day, five cases; eleventh day, two cases; twelfth day, one case; thirteenth day, one case; fourteenth day, one case; and in one case earlier than the seventh day.

Fluctuation was discovered in but two cases before the operation; he advises not to wait for fluctuation. His rule is to operate after the lapse of one week from the onset of the disease unless there should be clear indications of resolution going on. By this treatment, he says, we may be said to have disarmed this disease of its terrors.

It is scarcely possible, if we look at the favorable results obtained by Professor With, not to acknowledge that they are due principally to the omission of cathartics, and the prevention of peristaltic movements.

Twelve died of universal peritonitis, but they entered the hospital in an unfavorable condition, after having been purged at home; and of the two serious cases with universal peritonitis, which recovered, one had not taken cathartics at all, the other only one dose of castor oil. Sixteen cases recovered, many of them with very serious symptoms of local abscess. On the other side, it cannot be denied that some of the twelve cases might have recovered by Gurdon Buck's operation, as they had symptoms of local abscess before the universal peritonitis set in,

in four cases respectively seven, nine, ten, and fourteen days. Neither can it be denied that operative treatment in other cases might have cut short the long convalescence, and would surely have prevented the danger of universal peritonitis from secondary perforation of the abscess, and probably the danger of a relapse in the future, which is always more or less probable. By following strictly the treatment proposed by Professor With, we shall have less opportunity of using Gurdon Buck's operation; but, on the other hand, a judicious use of this operation will considerably lessen the danger, if the abscess progresses in spite of the treatment, and will be likely to prevent relapses.

Allow me, lastly, to report the case I treated; not because it contains anything more remarkable than the other cases published, but simply because it illustrates the extreme value of Gurdon Buck's operation.

Mr. Charles Lautz, forty-one years of age, engaged in a large manufacturing business, always enjoyed good health until five years ago, when he had an affection of the liver, which at that time was considered to be gallstone colic. He has since had three attacks similar to the one which follows, one of which kept him in bed six weeks. Last year he had a very severe intermittent fever. May 7th, 1879, he retired to bed perfectly well, but was awakened at three o'clock in the morning with violent pains in the right ileo-cæcal region. The pains were followed with vomiting, chills, with elevated temperature, perspiration, and a feeling of extreme weakness. The day previous he had taken a dose of salts. When I saw him, in the course of one hour, the temperature was 102, pulse 106; used sulphat. morphine gr. $\frac{1}{4}$, hypodermically, and ordered hot fomentations to the abdomen.

May 8. The pains continued during the day in spite of frequent hypodermic injections of morphine. A slight resistance is felt in the right cæcal region, commencing about two inches below the ribs and extending downward to a plane through the anterior superior spinous process of the ilium. Percussion was

dull above the swelling, soreness over the whole abdomen, but especially over the ileo-cæcal region. Ordered ten leeches upon the ileo-cæcal region.

May 9. Felt relieved after the leeches during the first part of the night, but towards morning the pains returned and continued during the day, although morphine was frequently used. Temperature 102, pulse 96. No vomiting, but hiccoughs. The swelling more distinct. The pains extend downward into the right leg. Considerable meteorismus and oppression. Repeat the leeches and castor oil.

May 10. Temperature 103, no action of bowels. Ordered two grains of calomel every two hours.

May 11. Several movements of the bowels. Temp. 102½.

May 13. Temperature 102, abdomen softer, except in the right ileo-cæcal region, where the swelling is more prominent; pains decreasing.

May 18. Temperature remains between 101 and 103; the tumor seems to extend farther downwards towards Poupart's ligament; cannot tolerate any pressure over the tumor; the rest of the abdomen normal. The bowels move spontaneously. Takes nourishment only in fluids. Drs. Miner and Tobie called in consultation.

May 20. Under chloroform narcosis; operation; Drs. Miner and Tobie being present, and assisting. An incision, three inches long, was made half an inch above Poupart's ligament, and parallel with it, through the skin and the different muscular layers till the fascia transversalis was reached. Even then no fluctuation was perceptible. A sharp-pointed canula, in connection with Dieulafoix aspirator, was thrust upwards and backwards, and having entered about one inch, matter flowed into the aspirator. A free incision was now made with the canula as guide, and about one-third pint of offensive matter was evacuated, but no concretions were found. The cavity was explored with the finger, and was found to extend upwards behind the cæcum and forwards toward the bladder. The cavity was syringed out

with carbolized water, a drain-tube introduced and the wound bandaged with a ten per cent. solution of carbolic acid in sweet oil. The fever disappeared immediately, the appetite returned, the wound healed kindly, so that on the 31st of May, eleven days after the operation, the patient sat up.

June 5th. Wound almost healed; he is able to drive out; a small fistula, with occasional discharge of matter, kept open for fourteen days longer; he suffered for some time considerably from meteorismus and difficult digestion, but little by little this symptom disappeared, although he even now occasionally complains of it, and on the 20th of June he was discharged cured.

AN UNRECOGNIZED FRACTURE OF THE NECK OF THE FEMUR,

OF NEARLY THREE MONTHS' DURATION—RELIEF OF ALL DEFORMITY
BY REFRACTURE—A CLINICAL LECTURE DELIVERED AT THE BUF-
FALO GENERAL HOSPITAL, BY CHAS. C. F. GAY, M. D.

Gentlemen—On December 29, 1877, or more than one year ago, this girl, K. S., then eighteen years of age, was at work in a laundry, and stood at the table ironing nearly all day long; at the close of the day she suddenly became disabled; suffered great pain of the hip and knee, and was put to bed. In about a week she was taken home; on January 19th removed to the Hospital, and on March 14th came under my charge, at which time I noted her right foot was everted, the limb two inches short, and the trochanter two inches further from the anterior superior spinous process of the ilium than that of the opposite side; this side measuring seven and the sound side five inches. There were, at least, two prominent signs, viz.: shortening and eversion of fracture of the neck of the thigh bone; whether it were intra- or extra-capsular or mixed fracture could not be

ascertained, and was of little consequence practically, since treatment is the same in either case. The patient stated her limb took this position (everted) from the first, and she let it remain so because it was easier in that position. As regards her previous history, she states she never knew any difference in her limbs, but "one was as good as the other," and she has always been, as at present, strong and healthy.

On March 23d I manipulated the limb, under ether, in the presence of several medical gentlemen and students, in the same or similar manner—except the employment of less force—that I would manipulate a limb in the reduction of a dorsal dislocation by the flexion method, which resulted in relief of all deformity, that is to say: eversion, shortening to the extent of one inch and a half, and the unequal distance between the trochanters and iliac spines were all overcome. Pain, which had been so intense and persistent as to require the use of anodynes, from this time ceased.

Extension, with only eight pounds weight, with the foot of the bed raised two inches, was employed. The day following the manipulations she was quite ill; her pulse ran up to 150 per minute, and it looked as if she might die before the day closed; in which event I should have been held solely responsible for damages. Her alarming condition was attributed, however, to the ether, which was so poorly borne, that, finding her pulse rapidly going up, its administration was not pushed to complete anaesthesia. Her sufferings, aside from that caused by ether, were slight. There was, as a matter of course, some swelling and pain of the thigh, which subsided in two or three days upon the application of warm fomentations. In four weeks extension was discontinued and the girl was allowed to get up and go about upon crutches; she was not able, however, to use them until one or two weeks afterward.

This, in brief, is an outline of the case (a report in detail of which is published in the *Medical Record*, New York, Oct. 12, 1878). To show the results of treatment this girl has kindly con-

sented to come here to-day. I have regarded the case as one possessed of so much surgical interest as to warrant me in inviting this large number present to-day, of the profession of the city, in order that the result may be seen and known, and to give as many as choose an opportunity of measuring the limb, and also that you may be able to see how well the patient can walk without assistance of crutch or cane, the use of which she abandoned a few weeks since.

The heel of the right shoe has been raised half an inch. The girl is able to walk, as you see, with scarcely more halting than has been acquired from habit, and upon careful admeasurement there is not more than half an inch shortening shown. The limb is readily inverted and everted, and the motion of the hip-joint is free and perfect in all respects.

Here, then, is a girl eighteen years of age, suffering intense and protracted pain, having a limb two inches short, and everted with trochanters unequally distant, by two inches, from the iliac spines, and yet, according to her own statement, has received no injury, and there is no history of injury. Her statements may be regarded as reliable; she appears truthful, and there is no possible motive for concealment or suppression of the truth.

Add, now, to the foregoing the additional facts, viz.: that these signs of hip lesion remained unrecognized for nearly three months, and at the expiration of that time manipulations overcame all deformity, and restored the limb to usefulness, and then you will readily come to believe with me, that the case is one of great interest to surgeons, and indeed as remarkable as any hitherto recorded in the history of hip-joint lesions. Sir Astley Cooper affirmed that in case of dislocation of the hip, two months was the time fixed, beyond which it would be imprudent for the surgeon to attempt reduction. But I am not aware that Sir Astley, or any other surgeon, fixed any limitation of time beyond which it would be imprudent to attempt reduction of a badly treated or neglected fracture of the neck of the femur. The result of this case may assist to fix the time when operative measures are to be proscribed.

As the case turned out well, with a result as good as could be desired, and since disability and deformity, which would have been permanent had the limb been "let alone," have been obviated and remedied, no person will deny that the manipulations were proper and wise, and that the end justified the means employed, and furthermore, I think it must be conceded that the case furnishes warrant, if not precedent, for the management of other and similar cases.

Now, what was the condition of this girl's hip that caused the limb to be two inches short, everted, and threw the trochanter two inches away from its normal position? There certainly must have been either fracture or dislocation, but there is only one luxation, and that is the everted dorsal (Bigelow) which involves rupture of the Y ligament, that could in any wise be mistaken for it. But the distance of the trochanter from the spine of the ilium would exclude this dislocation. Hence, here is a fracture which, at the expiration of three months, was either united by bone or a long ligament. I suppose it to be almost or quite impossible, by the force ordinarily applied in the reduction of a dorsal dislocation, to fracture the neck of the femur, from the fact that we cannot as firmly hold the upper portion as we can when refracturing the shaft; but a refracture requires less force, and it is quite possible, as in the case before us, to break up a callus, or if you please, refracture the neck of the thigh bone at three or more months after injury.

In answer to the question, how this bone could have been fractured, I reply that fracture of the cervix-femoris does not necessitate great violence or force. Fracture ought not to be overlooked in the absence of violence as a cause. Slight and trivial causes produce fracture, such, for instance, as muscular contraction, a mis-step, a trip upon the carpet, etc. Sir Astley Cooper cites the case of a woman who, "being at her counter, suddenly turning to a drawer behind her, some projection in the floor caught her foot, and preventing its turning with the body, the neck of the thigh bone became fractured."

At the age of this patient, separation at the epiphysis would be likely to occur with less degree of violence than would be required to produce a fracture at the diaphysis. The slight amount of shortening is indicative of non-absorption of the neck of the femur, and is suggestive of epiphysial fracture. I must not omit to call attention especially to the fact that, although the existence of fracture was established beyond scarcely any reasonable doubt, yet, during the final manipulations, a jerking impulse was conveyed to the hand, and a sound heard such as we are prepared to hear whenever a dislocation is reduced, which was so audible as to be heard by all, that gave rise to a mooted question whether or not it were a fracture or dislocation. Indeed, the resemblance was so close as to deceive some of those who were present into the belief that a coxo-femoral dislocation had been reduced. In order to resolve the question of doubt, the manoeuvre of flexion, rotation, abduction and extension was twice repeated, with the effect of eliciting the same audible snap, showing conclusively that it was caused by re-adjustment and coaptation of the ends of broken bones.

After reduction, and during the time of making extension, the upper and lower fragments were held in apposition by three or four bands of adhesive plaster, two inches wide, and long enough to embrace the circumference of the pelvis and include the trochanters. These bands also served to prevent eversion, and it is the best appliance for this purpose in the treatment of intra- or extra-capsular fracture.

I am quite fully persuaded that osseous union is possible in intra-capsular fracture. Non-union is usually attributed by writers—including Sir Astley Cooper—to want of nourishment of the detached head of the femur; but in all the post-mortem specimens I have examined, there has been no such evidence; indeed, the femoral heads of specimens I have examined have been well nourished, and have retained their normal size and symmetry. I apprehend the chief cause of non-union to be, non-apposition of the ends of the broken bones, and, as Sayre puts it, want of fixation after apposition.

CLINICAL REPORTS.

PLACENTA PRÆVIA.

REPORTED BY JOHN HAUENSTEIN, M. D.

THERE are few cases that arouse the physician to the full comprehension of his responsibility to his patient, more than so serious an accident as a case of placenta prævia centralis, the peril of life to the woman being so great, that it has been pronounced by the most eminent authorities to exceed that of some of the most malignant fevers. A case of placenta prævia, therefore, occurring in the practice of a physician, always taxes, to the utmost of his capacity, all his skill, resources and presence of mind. For this reason, and the fact of the case being typical of central implantation, I ask, respectfully, to be allowed the necessary space in your valuable journal to lay it before your readers.

Case: I was called in haste on the evening of July 28th, to Mrs. H., mother of seven children, and now about completing her seventh month of pregnancy, having ceased to menstruate December 17th, 1878. I found her in bed, somewhat alarmed and excited in consequence of having had a sudden gush of blood, issuing from her vagina, for which she could not account. The first sensation being that of warmth and of a fluid, as though the waters had broken, when she immediately took to the chamber, and passed a quantity of blood, amounting to about twelve ounces, as near as I could judge upon inspection. Although but thirty minutes elapsed from the time she was taken with flowing until my arrival, the hemorrhage had already ceased. A digital examination gave me no information other than that the blood had issued from the vagina; the os uteri being almost beyond my reach, and not dilated more than the size of my finger. Rest for a few days was enjoined, and iced lemonade ordered. On August 19th I was again hastily called, and found a repetition of all the essential circumstances as on the first occasion;

the hemorrhage being somewhat less than the first time. On the 22d of August she had a third hemorrhage, differing not materially from the last preceding.

The responsibility began to weigh upon me, and I informed the husband that preparations for the safety of his wife had now to be made. He unhesitatingly entrusted the management of the case to me, and like a tender husband enjoined me to do my whole duty.

I therefore called on Dr. White, whom Mr. H. had suggested as counselor, when the programme of our procedure in the case was discussed and determined.

Accordingly, on the evening of August 25th, at 8 o'clock, we met at the house of the patient, and proceeded to induce premature labor by the introduction of a No. 10 catheter between the uterus and the membranes. This was followed immediately by a copious flow of blood, so much so as to induce us to apply the tampon at once, which we had in readiness, and which was made of small bundles of absorbent cotton, tied, at intervals, to a ribbon, like a *kite tail*. A compress and the T bandage were applied to secure the tampon in place. Right here it may be in place to say that the woman is predisposed to faintings, and had already, during this stage of the proceedings, fainted several times.

Thus were the preliminaries of the battle commenced. The patient passed a quiet night, and beyond the withdrawal of the urine by the catheter, the physician in attendance was not disturbed from his night's rest.

At 7½ o'clock on the morning of the 26th, an examination was made, the patient having had several insignificant pains a short time before, but no signs of hemorrhage were discoverable, the patient being comfortable, with no signs of commencing labor. Dr. White had an urgent call to be absent from the city for a few hours.

At 9 o'clock the first pain, indicating that labor was beginning, took place, the effect of which was a sudden loss of blood, made

evident by the expulsion of clots from under the compress and bandage, and by the saturated condition of the same. The latter incident may, however, have been in part due to the liquor amnii.

There being no certainty as to the time when active interference would become necessary, I sent for Dr. Rochester, with whom Dr. White had already an understanding about the case, and had expressed his wish, in case of his absence, to have him summoned. But the pains subsequently were inconsiderable, occurring about every fifteen minutes, but yet gave occasion to the oozing out of some blood.

About 12 o'clock noon, Drs. White, Rochester and myself being in attendance, it was decided to remove the tampon and, if admissible, to deliver the child. The tampon being removed, the os uteri was found favorable for the manipulation of turning and delivery of the child, which was accomplished in a short time with but very little loss of blood to the mother. As soon as the operation was begun, a teaspoonful of Wyeth's fluid ext. of ergot was given the patient, quickly followed by a hypodermic injection of the same, and again repeated in about fifteen minutes; also injections of brandy, hypodermically, were given several times. After delivery, to avoid the greater danger incident to a case of placenta prævia, which is *post partum* hemorrhage, a plug, or rather a tampon, of absorbent cotton, saturated with cider vinegar, was applied to the patulous os and secured, the uterus having firmly contracted. So far everything promised well; the mother was comparatively comfortable and of good cheer, the child was crying lustily, and we doctors congratulated ourselves on the successful termination of the case, and that we could not very well improve upon the method employed.

This promising condition of our patient continued for about three-quarters of an hour, during which time, however, napkin after napkin was removed, considerably saturated with blood; although not very large, this hemorrhage, after the lapse of about three-quarters of an hour, told upon our patient; her pulse became feeble, her extremities cold and clammy, and large drops

of sweat pouring out upon her face. Being now left alone with the patient, I began to fear for her safety. Resort was had to stimulants, the foot-end of the bed was elevated, the vaginal plug was removed and another, saturated with a solution of *persulphate of iron*, substituted, which suppressed the hemorrhage completely. In the meantime I sent for Dr. White.

Several hours, however, elapsed. It was 4 o'clock in the afternoon before reaction took place, and our patient was out of immediate danger. After this, the patient made an excellent recovery. The only drawback for the first few days was a persistent vomiting, which, however, yielded to iced champagne. She sat up in an easy chair on the tenth day for half an hour.

Remarks: There are two points in a case of placenta prævia to which I desire to direct attention. The *first* is the inefficiency of the ordinary tampon to prevent hemorrhage on the accession of labor pains. The vagina, being a yielding cylinder, cannot be plugged with an unyielding tampon, successfully, against loss of blood from the uterus, except there be no expulsive efforts or pains. Because the force exerted upon the blood above the tampon in labor pains is such as to force a dilatation of the vagina beyond the tampon and the consequent escape of blood. I advocate, therefore, the use of the air-ball, or, what is yet better, the colpeurynter, to be introduced through the speculum, with a moderately thick layer of absorbent cotton drawn over it, and large enough to cover it after being inflated or distended with water. This tampon yields, and can be filled to the capacity of the vagina without its withdrawal. It can be withdrawn and replaced rapidly, which under certain circumstances may become necessary. The *second* is the post partum hemorrhage, dependent, in my opinion, upon the tardiness with which that portion of the uterus, upon which the placenta was implanted, contracts, and the numerous and large blood vessels with which it is supplied. To prevent such hemorrhage, the application of a plug, saturated with a solution of the persulphate of iron, *is the remedy*, always keeping in mind, however, that the contraction of the uterus, to prevent internal hemorrhage, be attended to.

REMARKABLE VITALITY.

REPORTED BY WILLIAM H. SLACER, M. D.

Mr. J., aged 48, weighing over 200 lbs., was struck by a locomotive and thrown some fifteen feet, falling heavily on the pavement; the accident occurred about 8 A. M.; soon regaining his feet he walked home, nearly a quarter of a mile distant.

Was lying on a sofa when I saw him, which was less than one hour after injury. Examination revealed severe scalp wound on left side, about two and a half inches long; left clavicle fractured and driven downwards; infra-clavicular region much bruised; abrasion on right arm. He appeared as though fast going into collapse; pulse 120 and feeble; extremities cold, respiration thirty per minute; complained of severe pain in region of heart; conversed freely. I ordered him to be put in bed; he refused as unnecessary, but after considerable urging he consented to comply, providing I allowed him to go without assistance; said he was not hurt badly. He walked, without help, up one flight of stairs, undressed and went to bed. I soon became satisfied that he had serious internal injuries; placed him in the most comfortable position, and without making a thorough examination, I endeavored to bring about reaction; gave hypodermic injections of morphine to relieve pain, heat to extremities, stimulants, etc.

10 A. M. Vomited a little clotted blood; detect crepitation right lung; air enters both lungs freely; respiratory murmur clear in left lung.

12 M. Less pain; pulse 124, fuller; temperature 99; respiration 30; symptoms slightly improved.

3 P. M. Pulse 128; respiration 32; temperature normal; has taken some beef tea; has not vomited since 10 A. M.

6 P. M. Weaker; pulse 138; respiration 34.

10 P. M. Gradually sinking; pulse 140; respiration 38 and labored; died at midnight.

Post-mortem following day revealed, besides the external injuries already described, a comminuted fracture of left clavicle,

which had penetrated the apex of left lung, first six ribs fractured about their middle, one or two were torn from the sternum, four had penetrated lung substance; on right side fourth, fifth and sixth ribs fractured near sternal end, and lung punctured in several places; lungs collapsed; thoracic cavity nearly filled with bloody serum.

During illness, there was an entire absence of brain trouble, the patient being perfectly conscious to the last moment of his life.

A CASE OF RUPTURE OF THE UTERUS.

REPORTED BY P. W. VAN PEYMA, M. D.

Mrs. C., aged forty-four years, eighth pregnancy; previous confinements natural and easy; labor commenced 8 A. M., Sept. 7. A midwife was sent for, who soon arrived, and from whom and the husband the first part of the history was obtained. The pains gradually increased in force, until at about 3 P. M. they acquired an extraordinary power, when at 7 P. M. they suddenly ceased entirely, and the patient complaining that something was wrong, Dr. Hauenstein, of this city, an experienced obstetrician, was sent for. Dr. Hauenstein found the head well engaged, vertex presentation, right anterior position. Forceps were applied with great ease, and child delivered with slight effort. The child, to all appearances, had been dead for some time. The placenta was delivered in the usual manner, being found partially in the vagina; no hemorrhage; uterus contracted well. Immediately previous to delivery, the mother's pulse was found to be very frequent and feeble; she also appearing somewhat exsanguine. After the delivery of child and placenta, the pulse was noted at 140, and weak. Great tenderness of abdomen was observed, and repeated vomiting shortly took place. Morphia sulph. gr. $\frac{1}{4}$ injected hypodermically. Dr. Hauenstein remained with patient two hours after delivery, and left, feeling apprehensive as to the result.

Sept. 8, A. M.—Tenderness continuing, principally in left iliac region; pulse 144; temp. $101\frac{1}{2}$; still vomiting; considerable tympanites; turpentine stupes applied; milk and turpentine injections; ice and whiskey by stomach; this, however, not retained; carbolic acid by vaginal injections. P. M.—Pulse 144; temp. 102; no material change; vomiting continuing; treatment continued; champagne substituted for whiskey; broths and beef-tea; tube passed into rectum; relieving tympanites slightly.

Sept. 9, A. M.—Pulse 135; temp. 102; passed a restless night. P. M.—Pulse 145; temp. 102; vomiting diminishing. From this time on until her death, at 7 A. M., Sept. 12, the pulse gradually increased, until, on the evening of the 11th, it reached 160; the temperature also increased slightly, but never exceeded 103, the point reached on the evening before mentioned. The patient during all this time, and up to within two or three hours of her death, was calm, hopeful, and perfectly rational. The night immediately preceding the day of her death, she slept a number of hours and awoke at 4 A. M., feeling very bright and entirely free from pain. She then soon became delirious, and remained so to the time of her death. The lochial discharge ceased within the first twenty-four hours. The autopsy was performed at 10 A. M., Sept. 14, by medical students, in the presence of Drs. Hauenstein, Diehl, Edw. Storck, Eugene Storck, Schade, Wetzell, and Van Peyma. In giving the history of the case to the physicians present, Dr. Hauenstein gave his diagnosis as rupture of the uterus, which, as will be seen, was verified by the post-mortem. The abdomen being opened, the peritoneum was found extensively inflamed; the left iliac fossa contained considerable extravasated blood. The rupture, which was on the left side and limited to the lower half of the uterus, extended nearly to the vagina, being at least two inches in length. A number of the physicians present satisfied themselves of its size and position by introducing the finger through it into the uterine cavity, the uterus being still in situ. The uterus on removal presented nothing else of interest.

SELECTIONS.

THE BROOKLYN TREATMENT OF DIPHTHERIA.

BY PAUL H. KRETZSCHMAR, M. D.,

"Alcohol is as antagonistic to diphtheria as belladonna to opium, or quinine to malaria."—E. N. CHAPMAN, M. D.

In the *Hospital Gazette*, of June 14th, is a very interesting communication, in which the writer aims "to speak briefly of the merits of alcohol in the treatment of diphtheria, and to report his experience in thirty cases." The alcoholic treatment of diphtheria has been named the Brooklyn treatment, inasmuch as Dr. E. N. Chapman, of that city, as early as 1863, published his opinion on this subject. He has defended his assertions since that time on several occasions, and has lately published a valuable little work on the subject.

Dr. Chapman in his first article, published in the *Boston Medical and Surgical Journal*, reported nineteen recoveries in twenty successive cases, and during a period of three years, from early in 1874 to October, 1877, he had treated eighty-five cases of diphtheria by large doses of alcohol, with only one death. In all he reports one hundred and twenty-five cases, *with only two deaths*. If compared with the usual mortality of the disease, the statistics given are so remarkable as almost to stagger belief, more especially as the doctor has not even lost a case of croup during the period of his observation. Having tried the alcoholic treatment in thirty cases, I can confirm what Dr. Chapman says about its great efficiency and value. Of the thirty cases treated by this method, many of them were of the most severe variety, and a number of them complicated by scarlet fever, and I only lost four. If added to the statistics reported by Dr. Chapman, the number will aggregate one hundred and fifty-five cases; and of these one hundred and forty-nine recovered, and six died, a mortality of about four per cent. Whatever the true pathology of diphtheria may be; whether the local affection is only a symptom of a specific condition of blood-poisoning, or whether

the disease should be regarded as a contagious infectious one which commences as a local difficulty, and which may either continue and remain such, or may lead secondarily to a constitutional affection, a large clinical experience shows that there is no form of treatment more effectual than the administration of large doses of alcohol, which does not act as a stimulant, and is not used to relieve or prevent great prostration, but simply for *its specific action as an antidote to the diphtheritic poison*. If administered early and in sufficient doses, alcohol acts as a preventive, its prophylactic properties being easily demonstrated. And even to cut short and prevent any of the sequelae of diphtheria, there is no remedy as reliable as alcohol. In most of Dr. Chapman's cases, quinine had been administered in addition to alcohol; in twelve of mine, all of which recovered, alcohol alone was used. The effect seemed to be almost as decided and quick without as with quinine. Lately I have always used quinine by inunction, and given the alcohol separately. I have in cases of diphtheria produced cinchonism by the frequent use of an ointment made of

Quiniae Sulp., 3ss.

Chloroformi, 3ss.

Bals. Peru, 3ss.

Adipis, 3vi.

M.

For the administration of the alcohol, the following formula has been generally adopted:

Spts. vini gallici

vel. Spts. frumenti, 3iiss.

Glycerini opt.

Syr. simplicis aa 3ss.

Aquae menth. pip., q s ad 3iv.

M.

To children under two years, 3i every hour; from two to three years, 3iiss; from three to five years, 3ii; from five to eight years, 3iiss to 3ss every hour.

In a very few severe cases champagne has been used. Great importance is attached to hygiene; cleanliness and fresh air is obtained first of all.

Whether any good effect can be obtained from the topical treatment will not be discussed. I have always used a light astringent application, either in the form of a gargle or spray, or as a powder blown on the diseased parts; chlorate of potash, alum and tannic acid, with carbolic acid, have been used. Of late Wyeth's tablets of chlorate of potash have been found a convenient substitute.

The experience gained in thirty cases strongly impresses the facts that at least in diphtheria there is no kind of food so well borne by the stomach as lime water and milk. Dialysed iron has been used during the convalescence, and in combination with some form of alcohol, prevented the conditions of anaemia and loss of nerve power which frequently follow diphtheria. A few cases may be cited:

Walter B., aged 7, a rather delicate boy of healthy parents, attended school as usual during forenoon of April 4th, 1878. He had a very severe chill at 11:00 A. M., and went to bed after coming home at noon; I saw the boy at 4:00 P. M.; temperature $105\frac{1}{2}$; pulse 134; skin dry; fauces coated with diphtheritic membrane; great prostration. I ordered brandy in teaspoonful doses every hour; cold application to head, and a carbolated chlorate of potash gargle. At 11:00 P. M. patient delirious; temperature $106\frac{1}{4}$; pulse 140; cold compresses continued, and brandy continued to 3iss. every hour.

April 5th. Patient had a restless night; at 10:00 A. M. he feels quite comfortable, with a temperature of $101\frac{1}{2}$; pulse 108; diphtheritic exudation extending. At 6:00 P. M. difficulty of breathing marked, the child struggling as in membranous croup; the administration of two doses of 3 grains each of turpeth mineral had the desired effect and caused free emesis; treatment continued.

10:00 P. M. Patient feels easier; dyspnoea diminished; temperature $102\frac{1}{2}$; treatment continued.

April 6th, 10:00 A. M. Patient slept some; temperature $101\frac{1}{2}$; a copious purulent secretion, followed by the disintegration of the membrane, took place; pulse very feeble. Under the "alcoholic treatment" the boy improved slowly, and was discharged free from any sequelae on April 22, 1878.

Louise H., aged 8, was taken sick with diphtheria in January, 1878. The origin of this case could be traced to sewer gas. Two other children, and the parents, escaped the disease by the exclusive use of alcohol and cinchonia, administered in the following way:

℞ . Cinchon sulp., 3i.
 Acid sulp. arom., q. s.
 Spts. Vini Gallici, 3vii.
 Glycerini opt., 3i.

M.

From a small teaspoonful to a tablespoonful given every two hours, according to age.

In this case, the false membrane covered almost the entire pharynx. It soon extended both into the nostrils and downwards; the larynx became implicated to such an extent that tracheotomy was seriously considered. Two teaspoonful doses of brandy, given every hour, day and night, did not seem to influence the circulation at all, producing none of the common effects of alcohol, but carried the little patient safely through a very severe attack. The fetid discharge from the nose continued for about twelve days. No sequelae.

The writer reports five cases of scarlet fever, complicated with diphtheria in the same house, all of which were treated with alcohol and quinine with a successful result in each case. Inasmuch as the same principle is involved in the pathology and therapeutics of these cases, we leave our readers to judge of the value of the treatment from what has been written above.

NEW PAPER SPINAL BRACE.

IN the New York County Medical Society, Dr. Morgan Vance showed recently a spinal brace, made of paper, glue and steel springs, which he considered more advantageous than the plaster of Paris bandages.

An ordinary plaster jacket is first made, allowed to harden, and then cut down, the inner surface carefully smoothed, and then a solid cast made by filling the jacket with plaster of Paris and mortar.

Over this cast the paper brace is made in the following manner: Canton flannel, intended to form the inner surface of the brace, is stretched tightly over the cast, and to its outer surface a paste is applied, consisting of one part of white glue, two parts of oxide of zinc, and six parts of hot water. Over this there is put horizontal strips of brown manilla paper, one and a half inches wide, and long enough to reach a little more than half way around the cast, each strip overlapping the other, until the cast has been covered in front and behind. Over this steel springs, such as are used in hoop-skirts, are placed one and a half inches apart, held in place by stout thread, then another vertical layer of paper, and finally a roller tightly applied.

This requires twenty-four to forty-eight hours to harden. After this it is cut down in front, lined, bound with thin leather along the edges, and eyelets inserted down the front. For the purpose of ventilation, pieces about the size of a dollar are cut out, care being taken to avoid the springs. The advantages of this brace are: 1, lightness; 2, ventilation; 3, durability; 4, perfect fit; 5, that it can be easily removed and replaced again; 6, that by insertion of a rubber band may expect continuous pressure over the projecting side of the thorax in lateral curvature.—*Hospital Gazette*.

THE USE OF HOT WATER IN HEMORRHAGE FOLLOWING THE EMPLOYMENT OF ESMARCH'S BANDAGE.

DR. PAUL BROWN, in the August number of the *Philadelphia Medical Times*, reports a case of capillary hemorrhage following the use of Esmarch's bandage for an amputation of the forearm, which bleeding was stopped instantaneously by syringing the parts with hot water (160 Fahr.). His attention was called to the hot-water treatment by Dr. Fordyce Barker's article on the treatment of uterine hemorrhage in that way. The patient had three months previously had his carpus resected by Lister's operation on account of necrosis, and after the operation a very troublesome parenchymatous hemorrhage occurred, which lasted for nearly two hours. It is of interest to know that the patient had a marked hemorrhagic diathesis. That the hot water did no injury to the parts, and did not retard the cure, is demonstrated by the fact that in twelve days from the time of operation, the parts had completely united, and a cicatrix had formed. Dr. Brown thinks that the hemorrhage following the use of Esmarch's bandage probably results from paralysis of the vaso-motor nerves, produced by the pressure of the tense rubber, and that the hot water acts as a powerful stimulant to these nerves, so that they produce a contraction of the arterioles, thus stopping the hemorrhage. Water of a temperature less than 150 Fahr. should never be used. Warm water is worse than useless.

COTO BARK.

PROF. FRONMÜLLER and Prof. Balz have been experimenting therapeutically with coto bark, a plant whose botanical position is not yet settled by naturalists. The powdered bark and a tincture made of one part bark to nine of alcohol were employed, the quantity of the latter used varying from 0.50 grm. to 25.00 grms. daily. Out of eighty-five cases of colliquative diarrhœa, fifty were cured, twenty-six were benefited, and nine showed no

results after the administration of the drug. In many cases the diarrhoea returned within a few days, but a repetition of the treatment effected a final cure. *As a rule, the success was in direct proportion to the dose, the medicine failing when small doses were used. The profuse sweating of phthisis was also controlled by it in a remarkable degree, and of ninety-one observations recorded by Fronmüller, it disappeared entirely in thirty-four, was diminished in twenty-six, and in eight was not effected. An alkaloid, termed cotoine, is obtained from the bark by means of ether, which may be used instead of the substance itself, 0.15 grm. being equal to 5.00 grms. of the tincture. Another crystalline body, paracotoine, is also obtained, and was used by Prof. Balz in cholera; but owing to the small quantity of the drug in his possession, he was unable to form a satisfactory opinion of its action; the results, however, were sufficiently favorable to recommend its further trial.—*Bulletin General de Therapeutique*, April, 1879.

OXALATE OF CERIUM IN PERTUSSIS.

DR. MORJÉ of New York, in the *Medical Record*, claims for this remedy:

1. That it decreases the attacks and thereby reduces the volume of the disease, and often checks it instantly.
2. That it is easily administered, only one dose being required in twenty-four hours.
3. That it secures nocturnal quietude.
4. That the possibility of complications is lessened.

It is given in doses of from one to three grains, before eating in the morning.

TREATMENT OF VESICAL ATONY BY ERGOTINE INJECTIONS.

In three cases of vesical atony observed in old patients, Professor Langenbeck has obtained the best results from hypodermic injections of ergotine. Immediately after the injection the contractile power of the bladder was augmented and the patients micturated more abundantly. At the end of some days the

bladder emptied itself almost entirely. In an old man, sixty-two years of age, who three or four times a day expelled about thirty grammes of urine, when his bladder contained more than half a litre, the very same day on which an hypodermic injection of twelve centigrammes of Benjeau's ergotine was employed, micturition was accomplished most satisfactorily; the prostate soon diminished in volume, and after four injections the cure was complete.—*L'Union Medicale.*

SYPHILIS BY VACCINATION WITH HUMAN VIRUS.

VIRUS was taken from the seven months' old child of a mother, subsequently known to be syphilitic, the infant at the time presenting all the appearances of perfect health.

With the virus thus obtained, twenty-five girls were vaccinated, twelve of whom in six weeks had ulcerations at the point of inoculation, succeeded by exanthem, oral and pharyngeal ulcers, and condylomata, syphilitic ozæna, etc. Three others had suspicious lesions in the neighborhood of the vaccine sore, which were not followed by constitutional symptoms.—*Gazette des Hospitaux.*

CHOLAGOGUES.

A COMMISSION, with Dr. Rutherford, of Edinburgh, at its head, has instituted an investigation into the action of certain cholagogues upon the secretion of bile. Its conclusions concerning the action of these important remedies, in daily use by the profession, are of great interest. The experiments were made upon dogs. The effects, thus obtained, may not be exactly similar to the action of these agents in the human system.

Podophyllin, aloes, rheum, euonymin, sanguinarin, iridin, leptandrin, colocynth, jalap, sodium phosphate, mercuric chloride, phytolaccin, hydrastin, juglandin, sodium and ammonium benzoate, benzoic acid, sodium salicylate, and nitro-muriatic acid, all are more or less powerful hepatic stimulants, positively increasing the amount of bile secreted, and all, except the last five, being more or less stimulant, and irritating to the intestinal

glands. Senna, colchicum, taraxacum and Scammony are feeble hepatic stimulants. Gamboge, castor oil and calomel stimulate the intestinal glands, but not the liver. Ipecacuanha is simply a hepatic stimulant. Magnesium sulphate is only stimulant to the intestines, as are also ammonium chloride and menispermum.

Calabar bean stimulates the liver, and atropia antagonizes this action, but atropia administered alone does not affect the secretion of bile.

It is also found in man that four grains of iridin at night is a certain remedy for "biliousness." Euonymin, in two grain doses, also has the same effect. Both are liable to be followed by depression, if the dose be too large, and both should be followed by a saline aperient in the morning.—*British Medical Journal*, Feb. 8, 1879.

INCONTINENCE OF URINE IN CHILDREN.

At the Harveian Society of London, Dr. Farquharson read a paper on this subject. He referred to the subject under three headings: 1st, Cases observed in children of pale, weakly organizations, in which there is no doubt some weakened condition of the sphincter vesicae, or of the nervous centres in the lumbar cord. Tonic remedies, especially small doses of wine, will act with good effect. 2d, Cases of greater severity, usually dating from soon after birth, and here it is necessary to make a distinction between the enuresis by day and that by night, for the latter frequently resists all medical treatment, departing often spontaneously about the period of puberty. Belladonna, which acts upon the unstriped muscular tissue, gives the best results in such cases. It is necessary to give full doses. Ergot proved disappointing, and santonian is without influence. Class three includes those cases in which the incontinence is truly a neurosis. Here galvanism is especially indicated, and blistering over the fifth lumbar vertebra, where modern experiment has demonstrated the motor centre to be situated. The recently proposed plan of excluding meat from the dietary was not found of much service.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, September 2, 1879.

DR. THOS. LOTHROP, PRESIDENT PRO TEM., IN THE CHAIR.

THE Association met, with the following members in attendance: Drs. Rochester, Trowbridge, Phelps, Lothrop, Keene, Mynter, Brecht, Bartlett, Hauenstein, Fowler. In the absence from the city of the President, Dr. Lothrop was elected President pro tem.

A ballot was taken on the application of Dr. A. R. Davidson, and he was declared elected a member of the Association.

Dr. Herman Mynter read a paper on Perityphlitic Abscess. (See Original Communication.)

DISCUSSION.

Dr. Hauenstein said the paper had interested him very much. He had treated quite a number of cases of typhlitic and perityphlitic abscess, and had witnessed several post-mortem examinations. In some of these was found perforation of the appendix, and in others a confused mass of inflammatory products, surrounding a central point of ulceration. He was able to call to mind a child eight or nine years old, where the abscess made a spontaneous opening externally, discharging pus, mixed with fecal matter. The parts healed and the child recovered. In another case of a similar character the abscess opened below Poupart's ligament, death ensuing.

Sometimes it is very difficult to diagnose the true character of the disease. Often the physician is not called in till after the inflammation has become diffused over the whole, or greater part of the abdomen. He remembers being called to see a young lady of about nineteen years of age, on the ninth day of her

sickness with symptoms of general peritonitis, and it was almost impossible to determine where the trouble began. An autopsy showed that it had its origin in or about the appendix vermiformis. He was unable to see how an operation could have been of any use in this case.

Professor Rochester, in the course of his remarks, said it gave him much pleasure to be present at this meeting, and hear Dr. Mynter's paper, which he could fully endorse. It called up a subject in which he had taken very much interest. In his professional experience he had met with twenty-three cases of perityphlitic abscess, seventeen of which were fatal.

The surgical treatment of perityphlitic abscess was not novel. Dr. Willard Parker operated twenty-five years ago or more. Prior to that time it had received similar treatment at the hands of English surgeons, but subsequently fell into disuse. Of late years a great many cases have been reported in the journals. The diagnosis of this form of disease is often made with great difficulty. The appendix of itself possesses very little vitality, and when in a healthy condition excludes the presence of any foreign substance. Rokitansky, whose pathological experience is probably unrivaled, speaks fully of this.

The appendix becomes the seat of a chronic inflammation, which gradually enlarges its orifice, permitting foreign bodies to enter. These may be of various kinds—strawberry seeds, cherry stones, or other small substances; but if the bodies usually present be carefully examined, they will nearly always be found to be gall-stones. The doctor exhibited an appendix, in which was embedded what appeared to be a bean, but examined more closely, proved to be a gall-stone. The claw of an oyster has been noticed in addition to the other foreign substances already mentioned.

He believes there often exists a chronic inflammatory state of the appendix for an indefinite period, which at some future time becomes the depository of a foreign body, around which concretions gather, until an abscess forms. This condition is often

associated with pain in the right leg, as in strangulated hernia, the limb being drawn up.

The pain is often severe, but may subside, and no inconvenience follow. Then, in about a year, another attack comes on of a similar character. He had observed a number of such attacks succeed each other in the same individual before a fatal termination. All of his cases, except one, occurred between the ages of ten and twenty years, the exceptional one being fifty years old. There was a slight preponderance of the male sex.

His treatment of the disease was strictly anodyne, avoiding cathartics. He relied upon opium and warm applications, but he remembered one case in which castor oil was freely used, and the patient got well. It was that of a young officer, a graduate of West Point Military Academy, who came under his care while suffering from this form of disease. He thought there could be no mistake in the diagnosis. He had been treated by Dr. G. W. Fisher, of Peekskill, N. Y., who made a like diagnosis. Dr. Fisher's treatment consisted of an half to one ounce of castor oil every second to third night, and opium at bed-time. This treatment was continued, and he fully recovered.

This is the only case he ever knew to get well under the purgative treatment. The cases we usually meet with are frequently preceded by diarrhœa; vomiting usually occurs; pulse about 110, temperature 102 to 104; pain in the right iliac region, perforation and death.

Should we detect a well-defined circumscribed abscess, it would be safe to operate; do not think it wise to plunge a trocar into the swelling. The operation should be regarded a delicate one, as much so as tying the iliac artery. It can be made without much danger.

Dr. Rochester was called to see a case which was thought to be suffering from colic. Disease of the appendix was diagnosed. He was treated with opium, and died on the fifth day.

At the autopsy was found thickening, swelling, and perforation of the appendix; was of the opinion that it had been

subject to catarrhal inflammation; he could not understand how a surgical operation would have benefited his patient. Surely we would not think of ligating the appendix.

As a rule the perforation takes place between the foreign body and attachment of the appendix to the cæcum; had one case where it opened at the extreme end, the opening communicating with the bladder and rectum. This might have been a favorable case to operate upon. In acute cases there is doubt of the value of an operation, unless a circumscribed swelling can be detected.

It must be borne in mind that these cases sometimes get well by a spontaneous evacuation. In two cases the symptoms subsided, and the patients were lost sight of. In one case, that of a boy who was kicked by another boy, causing disease of appendix, and death, the appendix was found gangrenous. The specimen was shown the members present. He could endorse Dr. Mynter's paper, and should recommend an operation if a local tumor could be detected.

A few years ago, Dr. Miner operated successfully for perityphlitic abscess. The patient had been ill for many years, and for a long time had complained of pain in the right iliac region. The abscess was circumscribed and could be readily detected.

Dr. Phelps said he made a post mortem examination of two or three of Dr. Rochester's cases. In the appendix of one was found a piece of straw. He was called to see a case last December. The patient, a boy, was wakened at midnight with severe pain in the right iliac region. A tumor was readily detected. Called Dr. Rochester in to see him the following afternoon. He was treated with opium, sat up in about a month, and recovered. Occasionally he comes to see me, complaining of pain in that region, and it is my practice to keep his bowels well open.

Dr. Mynter, in his closing remarks, said that in cases in which the disease commenced with an universal peritonitis, or in which universal peritonitis set in during the first days, no one would think of operating, although he believed the time would come, when we, in such cases, would open the abdominal cavity and

ligate the appendix vermiformis. The operation was now recommended in those cases only in which a distinct local tumor was felt, the meaning of the operation was, strictly speaking, to establish an artificial anus, and then leave the rest to nature.

Intermittent fever was reported to be more prevalent in this city than for many years.

The Association then adjourned.

EDITORIAL.

MEDICAL EDUCATION.

AT this season of the year the various Medical Colleges of our country scatter broadcast their annual crop of announcements as regularly as the trees shed their leaves. But while they attract the student with seductive statements of superior advantages, the older practitioner is apt to regard their allurements with a feeling of distrust. A circular of this sort too often furnishes the text over which he moralizes, concerning the American system of medical education, and perhaps he is inclined to join in the fashionable outcry concerning it.

There are certain disagreeable facts which stare him in the face, and which can not be blinked at nor disregarded. Not only are medical schools increasing rapidly, but they are already more numerous, and graduate more men in a shorter time than in any other country on the globe. In 1876 we had sixty-four schools to supply doctors to a little over forty million people. The United Kingdom of Great Britain has forty-one schools to about thirty million inhabitants. Germany has only twenty for forty-one millions, and in France the proportion is smaller still.

A further examination of statistics shows that we have now, on an average, one doctor for every 600 people, while

Canada has one to 1,200, Great Britain one to 1,672, France one to 1,814, and Germany one to about every 3,000 inhabitants. Moreover, foreign doctors are made much more deliberately than with us.

The Canadian or Englishman spends four years in study, besides starting with a better preparation. In continental countries it requires five years to complete the course, and occasionally six are demanded, while Young America skips through in half that time. Facts like these are suggestive, but by no means flattering, to our professional pride. Especially has the feeling found expression in the medical press, until now the topic is made almost conspicuous by its absence from the pages of any of our leading journals.

It behooves us, therefore, to notice these apparent or real defects in our present system, and face fairly the questions which present themselves. Without doubt, colleges have been rapidly multiplied, but this was partly necessitated by the extraordinary growth of the country. It should not be forgotten that the population has increased from about seven millions in 1810 to over forty millions in 1876, and instead of four schools, as then, we need of course many more at present.

It is argued that the number of physicians yearly turned out is too large, for the reason that we have already more to the population than can be found elsewhere. The comparison is not entirely just, however, for we have a far larger extent of territory over which medical men must be distributed. In 1870 there were with us only 9.8 persons to the square mile, while in the United Kingdom there were 249.9, in France 181.2, and in Germany 190. Comparing this, with statements made before, it appears that the number of physicians must, to a certain extent, be determined by the density of population. And this is not surprising. Where each man has a wide circuit, where the country is new, the roads often poor, and patients separated by long distances, it is but natural that the number should be larger than in thickly settled districts.

There are, however, certain important features of our system which admit of considerable improvement. A certain amount of preliminary training should be demanded, before professional study is undertaken. According to Professor Huxley, "It may be safely said that, with a large proportion of medical students, much of the first session is wasted in learning how to learn." And when the time comes to select a school, the novice frequently gives an undue preference to metropolitan institutions. He has a false notion that a large clinical experience is necessary from the first. The choice is frequently determined more by the size of the building pictured on the cover of the announcement than by any merit of the school itself. But in reality students have no business at a hospital, and in some countries are not admitted to them until after anatomy, physiology, chemistry, and materia medica have been disposed of. While at work upon these, a school which offers little or no clinical advantages is perhaps the best.

The fact should not be lost sight of, however, that when the American does study, he goes at it with all his might. He does that and nothing else. On the other hand, an Englishman mingles study with rowing, riding and the excitement of the Derby. The German takes his medicine deliberately, and digests each dose of lectures only after steeping it in the plentiful beer and tobacco smoke of the *Gasthaus*, where his corps meet every night. The Frenchman is even less diligent. Evening study is something foreign to his notions, and every one who has frequented the Cafe D'Harcourt or Jardin Bullier will appreciate how many hours in his life are worse than wasted.

But in spite of the difference in national characteristics, there is no disguising the fact that a course of three years is far too short, and some concerted effort should be made, not only to lengthen it, but to have the branches of the various curricula more systematically arranged.

Finally, the examination should be conducted by those who have no personal interest in the pupil or teacher. The Medical

Society of this State expressed the popular conviction when, in 1839, it resolved, "That the right of teaching ought to be separated as much as possible from the power of conferring degrees or license." When this is done with us, as it is in every other country, the various schools will vie with each other in honorable competition, and the worst features of our system will spontaneously vanish.

Out of this resolution ultimately grew the association of medical colleges, which by combined effort strives to meet the demands for a more perfect type of professional excellence. We are also gratified to recognize the efforts of the Buffalo Medical College in the direction of an improvement of the standard of education, by increasing the facilities for the acquisition of both a theoretical and practical knowledge of medical science. Every such attempt meets with earnest approbation from the leading physicians of the day, and shows that our system of medical training, though still imperfect, is being gradually improved to keep pace with the intellectual growth of the country.

MORTALITY TABLE.

Condensed from National Board of Health Bulletin for the four weeks ending August 30th, 1879.

CITIES.	Estimated Population.	Deaths.	Death rate per 1000.
BALTIMORE, - - - - -	400,000	596	19.39
BOSTON, - - - - -	365,000	667	23.45
BUFFALO, - - - - -	170,000	218	15.39
CHICAGO, - - - - -	460,000	895	25.28
CLEVELAND, - - - - -	160,000	251	20.39
LOUISVILLE, - - - - -	175,000	180	13.27
NEW YORK, - - - - -	1,097,000	2188	25.01
PHILADELPHIA, - - - - -	901,000	1345	19.07
ROCHESTER, - - - - -	90,000	*61	17.62
ST. LOUIS, - - - - -	500,000	554	14.4

* Only two weeks reported by National Board of Health.

WITH the September number, we enclosed to each subscriber a bill for the annual subscription, in accordance with our terms "IN ADVANCE." The response to this appeal has been generally prompt, for which we beg to return our grateful acknowledgments. We do not wish to be understood, also, as insinuating that the few on our list who have failed to respond to our call intend any indifference to our efforts to furnish a first-class journal, or any desire to discourage us in our work. We prefer to think that the habit of procrastination, peculiar to many members of the profession, may explain their delay. This, however, if persistently followed, may embarrass us, at no distant day, in responding to the polite note we receive monthly from our printer, to call at his office and settle. While assuring our subscribers of our forbearance towards their omissions, and our aim to deal generously, and honestly and justly with them, we trust they will second our efforts, by remitting, as promptly as circumstances will permit, the amount due.

The warm reception extended by the profession to the present volume, and the favorable criticisms of the medical and secular press, together with the rapid increase of our circulation, now double that of the previous volume, are sources of encouragement, which it will be our earnest effort to merit, by an endeavor to improve the JOURNAL, with each issue. Already we have been compelled to augment its size, by an increase of the number of pages, and by the addition of a new section, which our readers will observe in the Clinical Reports, to which we direct their special attention, and also invite their co-operation. The report of interesting cases, occurring either in general or hospital practice, will be of great value to the general practitioner, who seeks practical hints, to be utilized in his daily duties, rather than elaborate papers, which require more uninterrupted leisure than is often at his command.

It is confidently expected that in thus endeavoring to merit the patronage of the medical profession in every section of the country, we will contribute somewhat to that progressive spirit which keeps medicine in the vanguard of scientific research.

REVIEWS.

Clinical Medicine; a Systematic Treatise on the Diagnosis and Treatment of Diseases. Designed for the use of students and practitioners of medicine. By AUSTIN FLINT, M. D. Philadelphia: Henry C Lea. 1879. 795 pp.

In the preface to this admirable work, Dr. Flint says: "The belief that a work, devoted to the diagnosis and treatment of diseases, would be of use to the medical student, in his clinical studies, and useful as a book of reference to the practitioner, has led to the preparation of this volume. The plan of the work and the arrangement of diseases have been made with special reference to clinical medicine."

With this object in view, the author classifies diseases into the Respiratory, Circulatory, Digestive, Urinary and Nervous. The space devoted to the neuroses, on account of the activity of pathological and clinical research, given to this province of medicine, is the largest. By limiting the discussion of each subject, the author has condensed within a moderate-sized volume a concise treatise on practical medicine.

Dr. Flint, more than any other medical writer on this side of the Atlantic, combines in all his works, not only the beauty and elegance of diction of the essayist, thus making the productions of his pen almost classical, but elucidates with singular clearness every point and feature of the subject under consideration. Not unlike all his writings, the present volume is a model of literary excellence, and adds to the deservedly high reputation of the accomplished author.

The general practitioner will find in this volume invaluable assistance, while his limited leisure will yield profitable results if devoted to the attentive perusal of its pages. L.

Sexual Neuroses. By J. T. KENT. St. Louis: Maynard & Fedford, Printers and Binders.

This is a small work of 144 pages octavo. The title gives an idea of the contents, this being that usually found in writings

upon similar subjects. We find hardly anything absolutely new in its pages, and while it covers the ground fairly we can hardly consider that there exists so great a necessity for books of this nature as the writer seems to believe.

V. P.

Materia Medica and Therapeutics. By CHARLES D. F. PHILLIPS, M. D., F. R. C. S. E. Edited and adapted to the United States Pharmacopœa. By H. G. PIFFARD, M. A., M. D. New York: William Wood & Co.

The work is limited to the consideration of drugs of vegetable origin, and while not pretending to original research as to abstract questions, it does contain a great deal of practical information as to the use of drugs, much of it founded, as the author states, on the results of his own observations. Some of his conclusions are open to a "reasonable doubt;" as, for instance, the statement that "Belladonna is of almost unexampled importance," that "with the exception of opium there is probably no vegetable medicine so important in existence." The book presents, however, an extensive array of facts respecting the action of drugs, and much valuable information not found in the ordinary text-books, and we consider it well worthy of a place in "Wood's Library of Standard Medical Authors," of which valuable series it forms the eighth volume.

D.

The American Journal of Otology.

This journal comes to us filled with material fresh and practical, and it is not surprising when we consider that the editorial staff is composed of some half a dozen of the most eminent aural surgeons in America. In conjunction with these, Prof. Mayer, of Hoboken, furnishes articles relating to acoustics, which can not fail to interest even the general reader. Every one who has seen the admirable little volume on Sound, in the "Experimental Science Series for Beginners," must have been impressed by the rare faculty which this man possesses of simplifying apparently difficult subjects. And this effort to popularize special branches

of science is one of the sure indications of present progress. Not many years ago it was a current belief among the younger students at the Harvard Medical School that no one knew anything about the ear except God and Dr. Blake, and no one seemed to care about it either.

To-day we have two earnest workers in Boston, with others in different parts of the country, presenting the various phases of otology in a manner to interest a large circle of readers. Some of the articles are so thoroughly technical as to be of interest only to the specialist, giving results of deep researches, in departments of the subject hitherto unexplored. But the object of the journal is evidently not so much to record original observation as it is to furnish the profession at large with a practical view of the most recent discoveries in otology. H.

A Text Book of Physiology. By J. FULTON, M. D., M. R. C. S. Lindsay & Blakiston.

The one who buys this work is pretty sure of his money's worth of the essence of physiology. The author does not go into any tiresome details of the subject, but presents its main outlines in a concise and forcible manner. The microscopic structure of the various organs and tissues is described at length, thus giving the student a clearer idea of the manner in which their functions are performed, and if the numerous wood-cuts were more carefully executed, it might serve as a manual of histology as well. The practical phase of every question is, however, fully shown. The opportunity is not lost to explain the various tests for sugar and albumen, the uses of the sphygmograph, spirometer, and other methods or appliances which are of direct importance to the physician. The writer attempted to present "A well-digested text book on this subject, adapted to the wants of the advanced medical student and the general practitioner," and he has succeeded. H.

Guide to the Examination of the Urine, with special reference to Diseases of the Urinary Apparatus. By K. B. HOFFMANN, Professor at the University of Graz, and R. ULTZMAN, University of Vienna. From the Second Edition. Translated by R. FORCHEIMER, M. D., Professor of Medicine and Chemistry, Medical College of Ohio. Cincinnati: Peter G. Thompson. Cloth, \$1.50; Leather, \$2.00.

We most cordially recommend this little book to medical men. While, as the authors state, "It is not intended for the physiological chemist, or for those who make a special study of animal chemistry," we consider it one of the best books on urinalysis for the practical physician, who desires to determine the physical character and chemical constituents of the urine, *so far as they are important to him*. The numerous illustrations which accompany the text are well drawn and valuable, though rather roughly executed. The book is well printed, and its appearance is creditable to the publishers.

D.

Statistics of Placenta Prævia, collected from the Practice of Physicians of the State of Indiana. By ENOCH W. KING, M. D., Galena, Ind.

A pamphlet with this title has been received, with the request that it be reviewed. We have looked its pages over carefully, and are prompted to speak well of it. The doctor was led to undertake the labor of collection and classification through an expression made by Dr. Sutton, in a paper read before the State Society, in which he says, "That many of our physicians, whose range of practice is principally confined to the country, have a large amount of valuable unpublished experience on this subject, which if collected in the form of statistics would throw light on the frequency of the occurrence of placenta prævia, the modes of treatment principally adopted, and the fatality attending this accident within our State."

The one hundred and twelve cases have been thoroughly analyzed under about twenty heads. The article adds valuable information to what is already known upon this subject, and we

throw out the suggestion that here is a good field for others to follow the example of Dr. King, and that not alone as regards the subject of placenta prævia.

V. P.

Manual of Midwifery for Midwives and Medical Students. By FANCOURT BARNES, M. D., M. R. C. P., &c. With illustrations. Philadelphia: Henry C. Lea.

A very neat and really valuable little book of about 200 pages octavo. It is, as the title indicates, simply an introductory work, but is one entitled to great praise. It compares very favorably with a similar work, viz.: Swain's *Obstetric Aphorisms*. Its numerous illustrations are in many instances copied from the work of his father, Dr. Robert Barnes, on *Obstetric Operations*. We recommend it to those for whom it is more particularly designed, *i. e.*, the medical student.

V. P.

BOOKS AND PAMPHLETS RECEIVED.

A Treatise on Hygiene and Public Health. Edited by ALBERT H. BUCK, M. D., American editor of Ziemssen's *Cyclopædia of the Practice of Medicine*. New York: William Wood & Co.

The National Dispensatory. STILLE & MAISCH. Second edition. Philadelphia: Henry C. Lea.

Analysis of Urine. By HOFFMAN & ULTZMAN. Translated by T. B. BRUNE, A. M., M. D. New York: D. Appleton & Co.

Summer and its Diseases. By JAMES C. WILSON, M. D., Physician to the Philadelphia Hospital, &c. Philadelphia: Lindsay & Blakiston.

Student's Pocket Medical Lexicon. By ELIAS LONGLEY. Philadelphia: Lindsay & Blakiston.

Eye Sight and How to Care for it. By GEO. C. HARLAN, M. D. Philadelphia: Lindsay & Blakistou.

Report on Yellow Fever to the St. Louis Medical Society. By W. HUTSON FORD, M. A., M. D., Professor of Physiology in the New Orleans School of Medicine. St. Louis: Geo. O'Rumbold & Co.

A Case of Alleged Malpractice, with a Review of the Medical Testimony. By HOMER O. HITCHCOCK, A. M., M. D., of Kalamazoo, Mich.

The Future Influence of the John Hopkins' Hospital on the Medical Profession of Baltimore. By JOHN VAN BIBBER, M. D.

North Carolina Board of Health Method for Performing Post-Mortem Examinations.

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

GONORRHOEA.*

BY GEO. W. STONER, M.D., ASST. SURGEON U. S. M. H. S.

Gonorrhœa, or the disease popularly known as such, is not what the term in its etymological sense implies, it being derived from two Greek words, signifying a flow of semen, and as the urethral discharge usually distinguished by the above title contains no semen, it is quite clear that the term as used is a misnomer, just as much so as gastrotomy is for the Cæsarean section.

It would be preferable, therefore, to use the term specific urethritis, as distinguished from simple urethritis, which is different in character, and caused, as a rule, by means other than direct contagion from the vaginal discharge of a woman suffering from the virulent disease.

Specific urethritis is always produced by direct contagion; simple urethritis may be, and frequently is, but not always, as will be shown further on. But in order to avoid confusion, and inasmuch as long usage has given the term gonorrhœa a more or less definite signification, it may be well to continue the use of it, as applied to the specific urethral inflammation, and restrict

* Read before the Buffalo Medical Club, October 1st, 1879.

the word urethritis to the simple inflammation. Clinically, however, it is very difficult, if not impossible, to distinguish one from the other, and, as the treatment is essentially the same in either case, it is of little importance, practically, so far as the management of a given case is concerned. But there are other and better reasons why the distinction should be recognized. Gonorrhœa is urethritis, but urethritis is not necessarily gonorrhœa. And for this reason it is very important that the two diseases should be known by names very dissimilar, notwithstanding the fact that in the majority of cases the difference is not apparent.

Granting that simple urethritis, simulating gonorrhœa, is comparatively rare, we must not lose sight of the fact that such cases do occur; and to accuse a man or woman of having gonorrhœa, is, of course, asserting his or her infidelity, and may be the starting point of heaping accusation after accusation upon the innocent, and the cause of much unhappiness. Gonorrhœa ought not to be a disease of the married, nor indeed of the unmarried; unfortunately, however, it presents itself in all classes, married and unmarried, rich and poor, high and low, the preponderance, however, being largely on the side of the unmarried, and I have seen a case in a boy not more than twelve years old. Men who frequent houses of prostitution, or cohabit with street-walkers, are indeed fortunate if they contract nothing more serious.

The earliest history of urethral disease, of which we have any knowledge, is that contained in the fifteenth chapter of Leviticus, which probably embraces both varieties. Those who contend that the disease of that age was the simple urethritis have no good grounds for such *conjecture*. Were the habits, surroundings, and condition of the people of that age better, physically and morally, than they are of people of to-day? Is it not more reasonable to believe that the "*running issues*" of that time were, to a great extent, made up of what we at present know under the name of gonorrhœa? At any rate we are furnished with good practical advice in the chapter referred to.

Gonorrhœa is a local disease, a specific urethritis, notoriously contagious and usually acquired by coming in direct contact with a person having it. Any or all exposed mucous membranes may be the seat of the disease; all that is necessary to produce it, is simple contact in the sexual act or otherwise. Clinical experience goes to show however that gonorrhœal inflammation, in parts other than the sexual organs, is not very common. Gonorrhœal conjunctivitis being perhaps the most frequent, and this, according to Bumstead, occurs only once in about six hundred cases. It is said to be more frequent in the male than in the female, and oftener in the right eye than in the left, as most patients (according to recent writers on the subject) handle the penis and rub the eye with the right hand. Occasionally, however, both eyes are affected, as I have recently had a case under treatment, but in this patient the disease was acquired by using a towel, on board ship, that had been used by another suffering from gonorrhœa, the patient himself having no urethral discharge whatever.

But, to continue the subject of gonorrhœa and consider its history clinically: The disease as has already been stated is always caused by contagion, and usually makes its appearance about five days after exposure, but may occur as early as twenty-four hours or as late as two weeks. It is stated by some authors, that the shorter the period of incubation the milder will be the attack, but to this there are too many exceptions to state it as a rule. It generally commences by an itching or tickling about the orifice of the urethra and a sensation of heat in voiding urine; the lips of the meatus are found more or less swollen, which gradually and sometimes rapidly increases; between them is noticed a thin, sticky and bluish looking discharge, which, as the inflammation increases, becomes more copious, and of a mucopurulent or purulent character, and then changes to the thick yellow or yellowish-green which is sometimes mixed or streaked with blood. The swelling of the lips and mucous membrane of the urethra increase, and, if the inflammation be very acute at

about the sixth or seventh day, the whole glans and penis will be found swollen, and the urethra so red and sensitive that the slightest erection causes pain, and the act of urination is attended with intense scalding, while the stream is small or dribbling, the passage being obstructed by the swelling, and the mucous membrane eroded. Pain in the back and perineum is now also felt. Retention of urine may take place by spasmodic contraction or by extension of the disease to the prostate; but as the disease begins at the meatus and travels backwards, and, according to Desmoreaux, only reaches the middle of the urethra about the eighth day, retention will not follow, if proper treatment is commenced in time; at any rate, retention other than spasmodic is very rare in gonorrhœa, except in those cases where stricture previously existed. Involuntary seminal emissions are frequently caused by the local irritation, and are attended with sharp pain. As the disease advances, the symptoms become more severe, the perineal pain increases, and by extension or infiltration from the mucous membrane of the urethra into the meshes of the corpus spongiosum, the areolar structure becomes obliterated by the effusion of lymph, and the erectile tissue has not sufficient room to expand; as a consequence, very painful erections or chordee come on, and according to the extent and location of the inflammatory action or deposit, there will be a bending of the penis downward, like a bow, during erection; the urethra being apparently too short for the corpora cavernosa. If on the other hand the corpora cavernosa become the seat of inflammation, and the corpus spongiosum be not effected, the bending will be in the other direction, as I have recently had a case under treatment,—but this is rare. These painful erections or chordee are of course most frequent during the night and toward morning. The groin and testicles or rather the epididymis are also frequently involved. Inflammation of the inguinal glands with, in neglected cases, suppuration also occurs, as well as phymosis and paraphymosis. In some cases there is a general febrile action of considerable height, but in most cases it is

absent. After the lapse of ten days to three weeks, the acute symptoms may partially subside, and very much earlier if judicious treatment be resorted to in time; the discharge will become thinner, the heat and redness less marked, and the pain on urination gradually ceases, and the chordee becomes less frequent. Finally the discharge becomes very thin and watery and diminishes in quantity, till a single drop is noticed in the morning, and this, too, soon ceases. In unfavorable cases, however, the disease, as it goes on toward recovery, stops at the watery or muco-purulent stage, and keeps up a continual discharge, and to this, the name of chronic gonorrhœa, or gleet, has been applied.^r In many cases, gleet is caused and kept up by a contraction or stricture of the urethra, which is best treated by overcoming the stricture. But there are also many cases of chronic urethral discharge following gonorrhœa, in which very little, if any, real stricture can be detected. And according to the dissections of Sir Astley Cooper and Ricord, the seat of the disease is in the fossa navicularis and the lacunae. The disease, according to some authors, may extend from the urethra to the bladder, decreasing at the point of origin as it extends inwards, but this is very rare.

Gleet is kept up, in my judgment, in many cases by the diseased condition (the low grade of inflammation) that remains in the lacunae after the discharge from the urethra proper has ceased, where the thin watery or slightly purulent discharge continues from the mouths of these little cavities. If on the other hand the mouths of the lacunae become closed by the inflammation, and the discharge is occluded, a cyst is produced, which as a rule enlarges, softens, and finally comes to the surface where it can be treated by enucleation; the same as cysts in any other location, they seldom, if ever, open into the urethra. Abscess of the penis, caused by suppurative inflammation, occasionally occurs, and may involve the whole of the penis, and if it begins at the bulb or glands of cowper, as is rarely the case, it may involve the whole perineum and scrotum,

If ulceration into the urethra takes place, the case becomes more serious ; retention and infiltration of urine and the burrowing of the matter, all tend to increase the gravity of the case, and require close attention. The operation of external urethrotomy may become necessary. Inflammation of the lymphatic vessels is quite common in severe forms of gonorrhœa, and, if the inflammation extends outside of these vessels, reddened streaks, very sensitive to the touch, are seen on the sides and back of the penis, and the vessels feel like hard and knotty cords ; the glands become hard and painful, and the prepuce œdematus.

In some cases the lymphitis is limited to the superficial lymphatics of the prepuce, where there is a general diffused redness and œdema, and as a rule, troublesome phymosis. If suppuration occurs, it is to be treated by early incision to prevent burrowing, which, of course, also applies to all other forms of suppuration in these parts.

Other important complications or sequelæ of gonorrhœa are stricture of the urethra, gonorrhœal rheumatism, gonorrhœal ophthalmia, etc., but these, in themselves, are of much importance, and could not even be hinted at in a paper of this kind. Before entering, however, upon the practical part of the subject, (viz: the treatment of gonorrhœa or urethritis) and inasmuch as it is so important not to pronounce too hastily upon the character of a given case, it is desirable to have some understanding as to what constitutes the real, although not apparent, difference between gonorrhœa and simple urethritis.

The difficulty, and indeed the impossibility of distinguishing the true character of a urethral discharge, is fully recognized by all the best writers.

Van Buren and Keyes state emphatically that gonorrhœa cannot be separated from urethritis clinically, and that a urethritis presenting absolutely nothing to differentiate it from gonorrhœa may be acquired by a healthy young lover from his equally healthy mistress, by a young husband from his wife, and

that it may be produced by applying chemicals, or by introducing any abnormal and irritating substance into the urethra. All agree that the menstrual flow, and especially leucorrhœal discharges coming in contact with the mucous membrane of the penis may be the cause of urethritis, provided the system at the time of contact be in a condition for its propagation, or the urethra be in a damaged condition (the result of previous inflammations) or the urine be very acid and irritating, or some individual idiosyncrasy. Persons of a gouty or rheumatic constitution are liable to suffer from these causes. According to Simon, all inflammations, specific or otherwise, are communicable; that pus from a given inflammation is always, in its kind, to some extent, contagious. And Diday states that "the very fact of a woman having a discharge, no matter what its origin, she is liable to give a discharge to a man," which means of course to some men, for it is a notorious fact that one man may perform the sexual act with impunity with a woman having a discharge while a second immediately following him may become affected. This applies, however, only to the discharge of the simple character, and is explained by the fact of the second man having a large meatus, and being under stronger venereal excitement, and probably full of wine. The second man, however, according to Ricord, may soon become "acclimated," so that later on he may live with the same woman, having the same discharge, without contracting it.

Ricord's "receipt for getting a gonorrhœa," (or rather a urethritis) is based largely upon these conclusions, and consists in exciting the animal passions of both man and woman by wining and dining, together with dancing (round dancing) and performing the sexual act as often as possible during the night, and taking a prolonged warm bath, and a "precautionary" injection in the morning.

The treatment of gonorrhœa is frequently divided under two heads, the abortive and the methodic treatment, but this, it seems to me, is unnecessary, if not incorrect. The abortive treatment

is to a certain extent methodic, and the methodic treatment is directed towards aborting the disease—using the term in its broadest sense, *i. e.*, cutting short or thwarting the disease from its natural course and bad tendency.

The abortive treatment, or the “burning out” of the disease, as it was originally called, with a strong solution of nitrate of silver (10 to 40 grs. to fʒi) has long since been condemned as not only a useless, but a pernicious practice. Nothing, it seems to me, could be worse, except the solid stick or the stronger acids, than to inject a 40 gr. solution of nitrate of silver into an inflamed urethra; and here the question may arise as to the reason why such treatment cannot, with the same degree of practicability or impunity, be resorted to as in the treatment of mucous membranes elsewhere, as for instance, in the eye, the most delicate and sensitive of all organs, which may be fully answered by simply reviewing the anatomy of the parts.

Astringent injections are very important, and in my opinion the most important, as remedies in the management of a given case of gonorrhœa; but if nitrate of silver is used, it must be with caution, and in a very weak solution at that. There are other and better remedies. In gonorrhœa, as in some other diseases, we occasionally meet with cases that the usual good remedies given alone fail to benefit. Quinine is the remedy for ague, and is sometimes called a specific for it, yet we occasionally meet with cases that it does not control, and where arsenic plays a better part. In most cases of ague, quinine has a better effect when combined with a small quantity of opium, and in many cases is much aided in its effect, or the system is better prepared for its action by the administration of a mercurial cathartic or podophyllin.

There are, indeed, few articles of the *materia medica* that have not at some time or another been used in the treatment of ague or malarial fever, and this is equally true of the disease known as gonorrhœa. Copaiba, cubebs, oil of sandal wood, and a host of other articles have from time to time been used, and are still

the principal remedies recommended by comparatively recent authors, for internal administration; and granting that they are of considerable value in the treatment of many cases, especially if combined with an alkali, and properly administered, they are in my judgment, unnecessary in many, if not most cases. Nearly all the astringents of the materia medica have from time to time been used as injections for gonorrhœa, but so far as my experience goes, nothing, that is to say *no one thing*, is so useful as the sulphate of zinc; this alone in a solution of two to four grains to an ounce of water, or preferably rose water, or as I am in the habit of prescribing it: one to two grammes to two hundred and fifty cubic centimetres of water, will effect a cure in some cases; but if we combine the sulphate of zinc with tannic acid, in the proportion of two grammes of the former to one-half to two grammes of the latter in two hundred and fifty cubic centimetres of water, we obtain an astringent solution which in my experience has produced better results than any of the many other solutions and combinations that I have ever used. Of course this solution may be diluted, according to the indications of the particular case and the time of using it. The important part, however, in the use of this as well as any injection, is to properly inject it with a good syringe of small size, and to prevent the liquid from flowing out before its effect is produced. If the urine is voided previous to the injection which should be repeated at least four or five times a day or oftener, or if the urethra is first injected with simple water, to thoroughly cleanse it, a single syringe full is quite sufficient at one operation.

But is this all that is necessary in the treatment of gonorrhœa? In some cases it is, but in the majority of cases the internal administration of an alkali is very important and necessary in order to neutralize the acidity of the urine, and render it less irritating and scalding as it passes out of the urethra. Aside from this, however, there are other benefits derived from the continuous administration of an alkali in this as well as some other inflammatory diseases. It dissolves the fibrin of the blood

and to some extent retards its formation, and in this way probably prevents a very troublesome chordee, which, as before stated, is caused by the effusion of coagulable matter into the meshes of the corpus spongiosum. In many cases, especially if the inflammation be very acute, it is a good practice to give an alkaline cathartic in the beginning of the disease, and repeat it if necessary. Finally, rest in bed if practicable, light wrapping over the penis, cold applications if there be epididymitis or chordee, and in case of the latter, camphor and opium, or hyoscyamus or lupulin may be given with good effect.

An unstimulating diet, the avoidance of all alcoholic stimulants, and everything that tends to induce sexual excitement, together with the continuation of the treatment for a few days or a week after the discharge has apparently ceased, will in the majority of cases accomplish the desired end.

For the treatment of the disease in the female, where it is usually confined to the vagina, stronger injections may be used if desirable.

FOREIGN BODIES ON THE IRIS.

BY LUCIEN HOWE, M. D.

IN cases where foreign substances are lodged on the interior of the eye, a serious question often arises as to the advisability of attempting their removal. The amount of injury produced, the size of the body, and the position where it has lodged, are indications sufficiently marked, in many instances, to determine at once the best course to be pursued.

There are cases, however, in which this is not so easily decided, and I would call attention to the fact, that an answer to the question, whether or not we should interfere, often depends upon the nature or composition of the foreign substance. This perhaps can be advantageously shown by two illustrative cases.

No. 1. A little boy, D. L., came to me from Dunkirk, suffering from the effects of premature explosion of gunpowder. As a result, the entire upper part of his face was thickly studded with the imbedded particles, the left side being particularly disfigured. The lids were also swollen, lachrymation profuse, and photophobia extreme. An examination of the right eye, showed only a few grains in conjunctiva and cornea. But the injury to the left was more marked. The greater part of the cornea had been burned by the flash, causing the epithelial layer to become opaque. Numerous particles were deeply imbedded in that tissue, and some had evidently passed entirely through it, while others were thickly strewn upon the ocular portion of the conjunctiva. The patient was therefore etherized, and all the powder actually visible carefully removed. By means of anodynes the pain was alleviated, and under the use of atropine the condition of the eye greatly improved. As soon, however, as the opaque epithelium was replaced by a clear layer, a suspicious looking spot could be seen about the middle of the iris, in its superior and external quadrant. With the pupil dilated and the retracted iris thus thrown into folds, it was rather difficult to say whether this spot was a grain of powder, or simply a natural deposit of pigment. A solution of eserine was therefore dropped into the eye, which, by contracting the pupil, rendered the iris more tense and smooth, manifesting plainly the presence of a foreign body. Moreover, as the cornea continued to clear up, the line of entrance of the particle could be distinctly traced, and it soon began to make itself felt by the iritis which followed. This was sufficiently marked to cause some apprehension, but soon passed off, the injection disappeared and vision improved. Being obliged to leave the city about that time, I left the patient in charge of my friend, Dr. Abbott, and at the last visit the particle of powder was still distinctly visible, but the eye otherwise in a perfectly normal condition.

No. II. This patient, Peter S—, in June, 1878, while working at his trade as a stone cutter, was struck in the right eye by

a particle of steel. At first it was hardly noticed, and not till some time afterward, did it give him any especial annoyance. When, at last, he applied for relief, there was found to be considerable ciliary injection, an exudation in the pupil, and swollen iris, while in the upper and external quadrant of that membrane a minute black point could be clearly discerned. The patient was at once urged to have the piece removed, but became alarmed at the suggestion and disappeared. However, on the 9th of Sept. following he returned, the symptoms, in the meanwhile, having become aggravated, and the vision so impaired that he could not count fingers across the room, or $V = \frac{3}{100}$. He was then ready to submit to operation. Accordingly, chloroform was administered by Dr. Macniel, and after making a wide incision at the corneal margin, like that required for an iridectomy, I passed a pair of fine forceps into the anterior chamber, and attempted to extract the steel. The adhesions in the vicinity made its detachment impossible, and I therefore drew out with it a considerable piece of iris. This was cut off and the remainder being returned to its proper place, the eye was closed with a bandage. The wound healed rapidly, the improvement beginning with the subsidence of the inflammation, and fifteen days afterward, the vision had increased almost twenty fold—more exactly $V = \frac{3}{10}$. At his last visit, on the 16th of October, 1878, the injection had entirely subsided, and the patient was much gratified at the result.

Here, then, we have two excellent cases for comparison. In both the foreign substance was about the same size, and lodged on the same part of the same structure. In one case, its presence produced little or no inconvenience; in the other, an inflammatory process, with failure of vision resulted, which symptoms disappeared on the removal of the foreign body. The only well marked difference was in the composition of the substances—one mainly made up of carbon, the other was steel—the first, liable to decomposition only in a slight degree; the second, readily oxidizable.

I would not pretend to say how or why it is, that this destructive process, in an almost microscopic particle, can so effect the nerves and vessels in its vicinity as to produce a well marked inflammatory condition.

Clinical observations, however, tend to establish the fact, and in my experience, at least, it has occurred that grains of gunpowder, fragments of coal, glass and stone, have produced, in general, less irritation in the eye than substances more easily decomposed. This difference in behavior would appear to be an important point, and one usually omitted in the text books. It should not be supposed, however, that even the most unchangeable of foreign bodies can remain in the eye without considerable danger of subsequent inflammation. The tendency to sympathetic iritis is so great, and its results so serious, that every case of the sort must be looked upon with suspicion. It is only a matter of some satisfaction to think that when the substance is one not easily decomposed, the prospects are better for a favorable result. Nor would I be understood as intimating that the two cases cited constitute of themselves sufficient basis for any valid conclusion. They simply illustrate a series of facts quite frequently observed, and as such their history, and the inference to be derived from them, appear to be worthy of record.

CLINICAL REPORTS.

LUXATION OF FEMUR ON DORSUM ILII—REDUCTION BY MANIPULATION.

REPORTED BY WM. C. PHELPS, M. D.

F. W. H., Jr., a vessel captain, aged 41, a robust and powerful man, was brought to the Buffalo General Hospital, on the night of July 2d last, at about twelve o'clock, having a dislocation of the right femur on the dorsum of the ilium. The accident occurred about four hours previous to his admission, in the follow-

ing manner: He started to go down from the third floor of a building, and just as he reached the landing of the stairs, his foot caught in a piece of matting, which threw him down about five of the steps, his whole weight coming on the right foot, which drove the head of the femur upward on the dorsum.

It was a typical case of the injury, all the usual diagnostic signs being present—shortening, inversion of the foot, flexion of the thigh on the body, mal-position of the trochanter major, and head of the bone, which could be plainly felt on the dorsum, loss of voluntary motion, &c. Attempts at reduction had been made by two medical men by manipulation and extension before his admission, but without success. The patient was etherized by the resident physician, Dr. Sheldon, while lying on an operating table, and I attempted reduction by the usual method of manipulation, but failed. I then removed him to the floor, and proceeded to use *upward traction*, in addition to manipulation, as directed by Bigelow. I removed my left shoe, and after having flexed the leg on the thigh, and the thigh to a right angle with the body, placed my foot on the anterior superior spinous process of the injured side, passed my left arm under the flexed leg, and with my right hand firmly grasped the ankle. I now made strong but steady traction directly upward, at the same time gently rotating the femur, by moving the ankle from side to side, and in a few seconds the thigh began to move upwards, and after having traveled, it seemed to me, at least eight or ten inches, it suddenly slipped into the acetabulum, with a plainly audible sound. The whole operation did not extend over one minute of time. I then placed the injured limb beside the sound one, and found it entirely normal in length and position. He was placed in a bed, and in three weeks was about on crutches.

August 8th. He was around the hospital grounds without any support.

During his convalescence he complained considerably of lameness of his back, a slight complication of his injury.

I believe this case illustrates the value of the manœuvres, recommended by Bigelow, of upward traction in certain cases, and it may be of service to the profession to call their attention to it in this manner, in fact, the only thing in the case worthy of note.

ANEURISM OF THE BRACHIAL ARTERY.

TREATED WITH LIGATURE OF THE AXILLARY ARTERY AFTER HUNTER'S METHOD.

REPORTED BY HERMAN MYNTER, M. D.

JOSEPH ENGEL, 20 years of age, was sent to me by Dr. Tobie for operative treatment, August 14th, 1879. He is a strong and robust young man, who three months previously was stabbed with a small penknife in the upper and inner part of the right arm. Profuse hemorrhage followed, which was easily arrested by compression; the wound healed in the course of a week. One month afterwards, a little tumor was discovered beneath the cicatrix, as large as a hickory nut, pulsating and painless. It increased gradually in size, until three weeks ago it was as large as a hen's egg. During the last three weeks the growth has been rapid, but the pulsation has disappeared. He has a slight feeling of numbness in the hand, which easily tires with exercise. On examination, a tumor is observed as large as two fists, on the inner side of the arm, beginning two inches below the fossa axillaris. The circumference of the arm over the tumor is $16\frac{1}{2}$ inches, while the same measure on the left arm is but 12 inches. The tumor is $5\frac{1}{2}$ inches long, $7\frac{1}{2}$ inches in the transverse measure. The skin covering the tumor is very thin, of a bluish color, with many small veins. The tumor has some consistency, except on the top, where it is soft and fluctuating over a space as large as a silver dollar.

By slow compression it may be diminished one-third, and by compressing afterwards the brachial artery above the tumor it

keeps relaxed, but as soon as the compression is stopped, the tumor is immediately tense again. An aneurismal murmur is heard with the stethoscope over the tumor, vanishing as soon as the artery is compressed above the tumor. The thin brachial artery is felt pulsating above the tumor, but below the tumor no pulsation can be detected in the brachial or radial or ulnar arteries.

August 15th. Operation; under chloroform narcosis; Drs. Tobie, Lothrop, Diehl, and Van Peyma being present and assisting; the axillary artery was ligated about one inch above the tumor; the operation was performed strictly under the carbolic spray. The artery was ligated with carbolized catgut, cut short and left in the wound. The wound was closed with carbolized silk sutures, and covered with antiseptic gauze and salicylic jute. Bottles with hot water were kept around the arm for several days until the circulation was restored. The tumor kept soft for some days, but gradually became more and more solid; the wound healed by first intention without any trace of suppuration.

August 30th. Circumference, fifteen inches; no pulsation in the arteries below the tumor; no murmur; the tumor much smaller and harder; the feeling and the heat of the arm normal; slight numbness at fourth and fifth fingers, decreasing since the operation; Martin's rubber bandage applied over the tumor.

September 6th. Circumference of arm, fourteen and one-half inches; tumor, five inches long, four and one-half inches broad; slight pulsation felt in the radial artery; the arm feels strong and healthy.

September 20th. Circumference, thirteen and one-half; transverse measure, four and one-half; longitudinal measure, five inches.

September 26th. Circumference, thirteen inches; transverse, four inches; longitudinal, four and one-half inches.

October 10th. The tumor is gradually decreasing in size and feels hard, and the patient is at work at his trade as a carpenter.

The interest in this case rests with the antiseptic treatment, and especially with the ligature of catgut, with which it was

possible to get union by first intention, and consequently to avoid the danger of secondary hemorrhage, against which no surgeon who uses silk for the ligating of arteries can positively guard himself. Another advantage is that we may disregard the collateral branches, and may ligate, if catgut is used, at any point, inasmuch as the artery, at the point of ligature, is strengthened, instead of weakened, by the new tissue, formed in and around the catgut ligature.

"AN UNRECOGNIZED FRACTURE OF THE NECK OF THE FEMUR."

To the Editors of the Buffalo Medical and Surgical Journal:—Will you oblige me by publishing the accompanying abstract from the Hospital records; which is a part of the history (omitted) of the case published in the October number of your valuable Journal, as "An Unrecognized Fracture of the Neck of the Femur." Truly yours, C. C. WYCKOFF, M. D.
BUFFALO, Oct. 16, 1879.

CASE 7534-

KATIE SPEIGLE, age 18 years, American, single, domestic. Entered the hospital Jan. 16, 1878; had been sick 19 days; taken at night with acute pain in the shoulder; in the morning it had changed to inner side of thigh, well up; part was inflamed and very painful; her physician "suspected spinal fever," or rather the premonitions of such; later it was that dead bone was the active agent, and an abscess anticipated; at the time of entering the hospital, thigh was swelled and sensitive, the knee well flexed and the whole limb remarkably everted and fixed in position. This she said was the most comfortable position she could assume, and she claimed to have taken this position from the first. To move the limb caused great pain in the thigh. Investigation proved that she had an abscess in the thigh when five years old, which her parents attributed to measles; but it is learned that subsequently to the measles and previously to the trouble in the thigh, the patient had a fall on the pavement, and was immediately afterwards confined to her bed by the "abscess." This was the only illness she had experienced. After mature consideration it was decided that the patient was suffering from rheumatism, and she was given salicylic acid gr. x every 2 hrs. for 48 hrs., and then gr. x 4

hrs. for several days, with anodynes. Pulse at entrance and afterwards was Jan. 16 to 29th, A. M., 94, 114, 100, 102, 120, 100, 98, 100; P. M., 108, 90, 90, 91, 108, 110, 116, 100. Temp. ranged from $99\frac{1}{2}^{\circ}$ to $101\frac{1}{2}^{\circ}$. By the use of acid salicylic inflammation subsided at once. Rochelle salts were given also. In a few days swelling appeared in the knee joint, which also pitted and presented all the signs of rheumatism.

Jan. 30th. Vini colchici sem. gtt. xv., every 4 hours given in place of the salicylic acid. Rheumatism gradually subsiding.

March 1st. Rheumatism well but foot greatly everted, and measurement showed the leg two inches short, and while upon the sound side the distance from great trochanter to ant. sup. spin. process was $4\frac{1}{2}$ in., upon this side it was $6\frac{1}{2}$ in.

March 10th. Extension by weights and pulley 12 lbs. continued 13 days. Extension relieved her of pain, previously felt in hip-joint, for a few weeks only, and it was thought the foot took a more natural position.

March 23d. Leg manipulated by Dr. Gay, which resulted in lessening the shortening 1 in., and lessening distance from trochanter to spine from $6\frac{1}{2}$ to $4\frac{1}{2}$ or 5 in. Foot was also brought into natural position and readily retained there. Extension was again applied, 8 lbs. wt. being used. Before manipulation she was partly etherized but took the anesthetic very badly, so that insensibility to pain could not be established perfectly with proper regard to safety. She was removed to a hard bed and given morphia sulph. gr. $\frac{1}{4}$. Pulse from March 23d and afterwards was, A. M., 160, 130, 108, 120, 118, 120; P. M., 158, 130, 108, 120, 118, 120. Temp. A. M. and P. M., $102\frac{1}{2}^{\circ}$ — 102° , 101° — $101\frac{1}{2}^{\circ}$ — 99° . Some dyspnoea and pain in chest and slight hemoptysis occurred the succeeding evening; digitalis given; gradually improved; leg all right save pain in hip-joint; morphine given.

April 1. Leg one inch short. The patient says her father had told her that this leg was always shorter since the "abscess." Her mother did not know of it, and no positive proof was given.

IMPERFORATE ANUS.

THE RECTUM COMMUNICATING WITH THE VAGINA.

REPORTED BY THOS. LOTHROP, M. D.

IN an able paper, read before the New York Obstetrical Society, in January, 1872, Dr. J. H. Pooley reported a case of this malformation, which is the rarest variety of imperforate anus. In the same valuable contribution is a record of thirty-seven cases, all that could be found, some of which date back to the early part of the sixteenth century. The extreme rarity of the malformation, and the interest existing in the profession to preserve a record of all cases, especially of congenital defects, is my apology for this "clinical record."

Mrs. F., aged 35 years, German, was delivered May 5, 1874, of a female child. The labor was a natural one, the mother and child requiring only the care and attention given by the accoucheur in ordinary cases. The usual inquiries were made the following day in regard to the child, its power of evacuating fæces and urine, to which satisfactory answers were given by the attendants. As soon as the mother had recovered sufficiently to care for her child, observing that there was something unusual in its manner of evacuating the bowels, she summoned me. Examination revealed an imperforate anus, and in passing a small probe into the vagina, an opening in the recto-vaginal septum was observed, just within the os vaginæ the orifice being easy of detection, the fæcal matter passing at the time of the examination. The natural site of the anus was marked by a discolored spot, with lines or plicae of the integument radiating from it. The advisability of an operation was laid before the parents, who objected to any interference, on being assured that there was no immediate danger to the life of the child. Frequent importunities to open the anus failed to change the decision of the mother, and operative interference was not resorted to. In the following August, the child was attacked with gastro-

intestinal disease, to which it rapidly succumbed, its death occurring at the age of four months.

This malformation possesses many features of professional interest. It is not necessarily dangerous to life; one of the reported cases, it is stated, lived one hundred years; three are stated to have borne children; and others failed to discover the deformity until they reached adult life; others reached the ages respectively of twenty, twenty-two, seventeen and sixteen years. The fistulous opening in these exceptional cases must have been very large, and therefore sufficient to answer the demands of nature. Accumulations may occur, the faecal evacuations being insufficient to unload the intestines, as in a case reported of a child who lived to the age of four and one-half years, the colon being distended to such an extent as to encroach on the thorax. It is therefore the duty of the surgeon to advise the operation whenever he is consulted in these cases, even in the first month or two of life. It consists of two parts, first to secure an opening at the normal site of the anus, and second to close up the fistulous orifice. Two successful operations are reported, one by the late Dr. Parrish, and the second by Dr. Rhea Barton, formerly surgeon of the Pennsylvania Hospital. The following is the mode of operation adopted: Introduce a director into the fistulous opening, and with a bistoury lay open the vagina and integuments as far back as the part where the anus should be; then remove a small portion of the integuments if necessary, and dissect down, until the termination of the gut is reached, which is opened freely. By this method, the anterior boundary of the incision would be the fistulous opening in the vagina, and posteriorly, it would terminate where the natural outlet ought to be. The subsequent treatment consists in endeavoring to promote granulations and the cicatrizing of the original opening, and so much of the anterior portion of incision as rendered the vagina incomplete. Both operations were successful and the patients were able to retain or discharge fæces at pleasure.

TRANSLATIONS.

HYSTERIA IN CHILDHOOD.

TRANSLATED FROM DANISH BY HERMAN MYNTER, M. D.

PROFESSOR GAEDKEN, of the University of Copenhagen, has lately published a paper upon this subject which we consider of interest for our readers.

The writer gives first some general remarks upon our want of knowledge of the pathology of hysteria, and consequently the difficulty in classifying these diseases, especially as the name is used to signify certain forms of insanity. Formerly it was supposed that this disease had a certain causal connection with the female sexual organs, and would only be found in women; and furthermore only when the sexual organs are developed. Late experience has shown that hysteria, in fully developed form, may be found in nervous men, and occasionally in children of both sexes. The symptoms in children, although often very violent and apparently of very serious nature, yield in a remarkable manner to moral treatment. The cases mentioned are seventeen in all, of which four were girls, thirteen boys. Our space allows us to publish only the most interesting.

1. M. H., a girl 10 years of age, entered the City Hospital in December, 1878; no hereditary predisposition; the patient gives an impression of being a spoiled child; her manners are conscious, affected and silly; eight days previous, she had, without any known cause, attacks of convulsions, commencing as a convulsive tremor of the whole body, little by little increasing to violent clonic spasms; the attacks last about half a minute, and occur as often as a hundred times in 24 hours, day and night; she is but partly conscious during the attack, after which she is immediately well, and continues the sentence at the point at which it was broken off. The family is grieved and anxious on account of her condition. It is also noted that she is well nourished,

very affected and also occupied with her disease ; likes to speak and describe it ; if we desire to witness an attack, she has one immediately, lasting 25 to 30 seconds, consisting of strong clonic spasms in muscles of the face, body and extremities ; it is evident that she takes good care not to hurt herself during the spasms ;—left alone, she slept well the first night ; in the course of the following day she had about a hundred attacks, which were perfectly ignored ; at the next visit she was severely spoken to during an attack which was perfectly interrupted by the fright. She was then told that she should stop the spasms ; that she was able to control them if she would, and that visits would not be permitted to her until the spasms stopped ; during the day but a few and feeble spasms, after that none ; seven days afterwards she was discharged cured.

2. M. K., a boy eight years of age ; no hereditary predisposition, but a sister is hysterical ; had a fall when ten months old, from the third story, fracturing the thigh and receiving some contusions of the head ; for a year has suffered frequently from headache and vomiting, sometimes accompanied with delirium ; suffered for ten weeks from protracted and strong attacks of convulsions, occurring especially during evening and night, as often as ten times in twenty-four hours ; they commence with crying, the patient becomes stiff in the neck, then in the whole body, with convulsive spasms in the extremities, froths at the mouth, etc. He is very irritable and exacting, compels the mother to carry him around during the attacks, beats and kicks her in his spasms, and tries to bite her nose ; has attended school till lately, where he was clever and behaved himself well. The mother is a widow, very good natured, weak and irresolute, and unable to make herself respected by the children. The patient entered the hospital in November, 1875, was healthy-looking and without any traces of disease. He answers questions rationally, speaks with a certain pride of his spasms, which he paints with bright colors : “ First, I get as stiff in the neck and back as a stick, then black as coal in the face, froth at the mouth, and want to bite everybody near me.”

He was greatly astonished and indignant, the first evening, in receiving the injunction not to have another attack, as he would be put in a cell, a place painted to him in very dark colors. He was thereafter well for three weeks, and had but one attack at the first visit of the mother, who was immediately sent away, and after a serious menace the attack disappeared. Nothing heard from him since he left the hospital.

3. C. A., a girl nine years of age, inmate of a public institution, entered the hospital in March, 1878; no information of hereditary predisposition; has been four years in the institution; was always perfectly well, but is described as a quiet and dispirited child, shy and spoiled; will not play with the other children. Seven months previous she had an attack of chorea, lasting one month and resulting in a paresis of both lower extremities, so that she was unable to walk, and during half a year crept around on hands and knees. The treatment consisted in iron, baths, etc., but without any result. For a month she has vomited after eating anything she dislikes, and it has been necessary to cook separate dishes for her; she does not vomit if served with what she likes; has lost flesh, complains of feeling tired and weak; the urine passes involuntarily every moment.

At the hospital it is noted that she is a pale, thin and tiny child, with whimpering, dispirited manners; she cried and desired to go home again. At the examination the first evening she was able to move all muscles of the lower extremities perfectly well while laying in bed, and with full and almost normal power; nevertheless she asserts that she cannot stand upon her feet; she was immediately taken out of bed, put on the floor and peremptorily ordered to stand; after a few awkward attempts to tumble and fall, she finally stood, as she found that no one would support her, commenced thereafter to walk, and walked at last without support through the whole corridor; was ordered iron and strong nourishment; she surprised very much, the next day, visitors from her home, by running around quickly in the hall, slept and ate well, became soon confident and had natural

childish manners. During three weeks she had no symptom of disease whatever, and was then discharged.

4. J. V., 13 years of age, pupil in a college outside Copenhagen; no hereditary predisposition; has had the common diseases of childhood; always been well. In August, 1876, he left his parents' home and entered the college, where he showed himself a clever and smart boy. After four days he was taken sick, and was confined to his bed for three weeks with what was considered to be a gastric trouble; the convalescence was exceedingly slow; complained now and then of headache; was for a long time excused from study, and at last sent home to remain till after vacation. At home he soon recovered and returned to school again in January, 1877. After scarcely four weeks the disease commenced again, with pains in both knees, considered to be rheumatism and resisting all treatment. He complained of heaviness and pain in the head, sleeplessness, nausea, weakness and constipation; the pupils were a little dilated and unequal, the pulse irregular (60 to 65); complained furthermore of hallucinations; became touchy and difficult to manage; domineered over his attendants; cannot eat anything except what he likes, and demands the most absurd things; during the night he writes the announcement of his own death and funeral with mourning verses, frightens his nurse by making her believe that he has a pistol in his bed, with which he will shoot her, complains now of this, now of that, and of hallucinations of the most remarkable nature; keeps his bed all the time, and complains of pains everywhere. A physician who was consulted considered him insane, and all his attendants believed him seriously ill. This comprised the record of the case.

Taught by former experience, I advised him to be sent to the hospital, and promised the symptoms would soon disappear. They acceded to my advice with great hesitation, and were so apprehensive over the trial, that, during the journey, they sent a dispatch to that effect; the patient, however, endured the journey well. On arriving at the hospital I spoke seriously with him.

He was pale and thin, and had a suppurating issue in the neck. The examination did not show any disease; the pulse was 72, a little irregular; ordered iron and arsenic in increasing quantity, and the issue to be allowed to heal. He ate and slept well, presented no symptoms of disease whatever till he was discharged, after which time he remained some time in Copenhagen and was perfectly well. Against my advice he was sent back to school, where the former symptoms, in a little while, commenced again. Consulted again, I advised to ignore his disease, and have since heard nothing about him.

The cases mentioned above, Professor Gaedeken says, are similar to those which are described by different authors as hysteria in childhood. We may, to be sure, assert that there was nothing whatever the matter with some of these children, that they have been naughty and spoiled at home, but as soon as they entered the hospital became well-behaved and did not show any symptom of disease (see case No. 2 and 4). It is not an unfrequent occurrence that boys, of 15 or 16 years of age, will not work, and therefore make their parents, especially their mothers, believe that they must stay at home, that they are sick, etc., but such cases are easily recognized, and are not called hysteria. But it can scarcely be believed that a little boy of eight years (see case No. 2) should for ten weeks disturb his own and his mother's sleep, simply to be carried on her arm and have the pleasure to kick her and bite her nose. Such an act would suppose an amount of energy which such a child could not display. On the other hand, Professor Gaedeken acknowledges that hysterical symptoms especially are found in spoiled nervous children, that they may come by imitating a hysterical sister, or be reared by a foolish compliance of the parents, and that the symptoms may get worse and worse, because the child willingly gives up to its sufferings and considers that its convulsions are interesting and of remarkable occurrence. Under such circumstances, especially if the nutrition is feeble, dangerous symptoms may be developed while we may see, especially in the

commencement, that the children if taken away from home and their disease ignored, are able to control their symptoms, which surely may be considered unnatural in childhood, and for that reason are more easily forgotten and subdued than in older children.

FOUR CASES OF NERVE-STRETCHING.

TRANSLATED FROM DANISH, BY HERMAN MYNTER, M. D.

DR. MAAG, of Copenhagen, reports two cases of obstinate sciatica, one of them connected with strong clonic contractions in musculus gluteus maximus, both of which recovered by stretching of the sciatic nerve. The disease had lasted $1\frac{1}{2}$ years in one case, three months in the other, the patients being respectively nineteen and twenty-three years of age. All other treatment had proved useless. An incision two inches long was made in the direction of the nerve, commencing at the lower margin of the musculus gluteus maximus, just between the trochanter major and the tuberositas ischii. The nerve was exposed and brought forward in the wound by aid of a hook, and traction, both in the central and peripheral direction, was made for a few seconds with considerable force. The wound did not heal in any of the cases by first intention; in one of them abscesses occurred on the femur. But the pains and contractions disappeared immediately, and both patients were discharged perfectly cured.

The two other cases are reported from the city hospital at Copenhagen, for affections of the accessory nerve. The first case was that of a woman thirty-one years of age, who six years previously, after an attack of pneumonia, suffered from a chronic spasm of the accessory nerve, which resisted all treatment. An incision was made, under antiseptic precautions, two inches long, at the sterno-cleido-mastoid muscle, lower third. The fascia colli was divided by crucial incision and the nerve

exposed. The nerve was stretched, with a strabismus hook with considerable force, in central and peripheral direction, and a piece of the nerve twelve millimeters long was resected. The contractions commenced again after the cessation of the narcosis, but ceased after $\frac{1}{4}$ hour and have not since reappeared. The wound healed by first intention. Both the sterno-cleido-mastoid and cucullaris muscles contracted normally, and neither voice nor respiration were affected by the operation. The second case was that of an unmarried woman, thirty-one years of age, who for four years had suffered from chlorosis, and for one year and a half from a chronic spasm of the accessory nerve, which increased steadily in spite of all treatment. The operation was performed in the same way, but one and a half centimeters of the nerve were resected. During the first month, following the operation, the contractions continued, although in a less degree, and then disappeared perfectly. The motions of the head are free and normal. In this case, also, the wound healed by first intention, and the cicatrix was scarcely visible.—*Nordiskt Medicinskt Archiv.*

THE INFLUENCE ON MORTALITY OF THE ANTI-SEPTIC TREATMENT IN WOUNDS ON THE HEAD.

TRANSLATED FROM SWEDISH BY HERMAN MYNTER, M. D.

PROFESSOR ESTLANDER, in Helsingfors, has since 1860 treated 341 cases of lesions of the head, the lesions of the face not counted. The treatment, from 1860 to 1869, was according to old-established principles, but from 1870, Lister's antiseptic treatment has been used.

He divides his cases into three groups: 1, simple wounds; 2, wounds with denuded bone; 3, wounds with fracture of the skull, and lesions of the brain.

The mortality in the first group, simple wounds, scarcely shows any difference in the two periods; from 1860 to 1869,

eighty-two cases, with three deaths; from 1870 to 1877, ninety-five cases, with three deaths.

In the second group, wounds with denuded bone, the difference in the mortality is quite evident, being in the first period seven deaths in thirty-seven cases, or 19 per cent.; in the second period one death in sixty-seven cases, or 1.5 per cent. By using antiseptic treatment, the author regards the prognosis as favorable as that of simple wounds.

The third group, especially wounds with fracture of the skull and lesions of the brain, shows the advantage of the antiseptic treatment, nine out of twelve, or 75 per cent., dying in the first period, two out of thirteen, or 15 per cent., in the second period. Cases that terminated fatally during the first twenty-four hours are not counted. The same improvement in the prognosis by antiseptic treatment is seen in other lesions. Of thirty-one cases of complicated fracture of the extremities he lost sixteen in the first period, and of ten cases of penetrating wounds of the knee-joint six, while in the second period, with antiseptic treatment, of sixty-six cases of complicated fractures but nine, and of twelve cases of penetrating wounds in the knee-joint, but two died.—*Nordiskt Medicinskt Archiv.*

SELECTIONS.

HYSTERIA IN CHILDHOOD.

IN the *Pacific Medical and Surgical Journal* (September, 1879) Dr. Buckley mentions, among other cases of hysteria, one of a child which in all particulars is similar to those referred to under our Translations. A child of ten years lies in bed with the right leg drawn up; says she has pain in knee and hip-joints; seems a healthy, well-developed child, and had been very fond of play until ten days ago (March 20, 1879),

when she complained of the leg, and they believed she had in some way hurt herself, and suspected hip disease. I found the temperature of knee and hip-joints of the affected leg the same as the other. In striving to move the leg a little, the hip-joint showed no motion; on the contrary, the spinal column moves with the motion of the leg. The flexion of the leg, however, was not that generally accompanying hip-disease, for the heel was drawn up almost to the nates.

The child spoke little, looked quite grave, and seemed to suffer little or no constitutional distress. I informed the parents that there was no disease of the hip-joint, but a serious trouble of the spine, believing the case to be one of progressive infantile paralysis, more especially as the child had had a severe attack of diphtheria within a year. Next day I learned that the child had also lost her speech, and this, while it might seem to confirm my original opinion, had the very opposite effect, for the reason that there was no paralytic affection of the left leg, none of the right arm, none of the muscles of deglutition, the appetite remaining unaltered. Ordered the spine rubbed with a mixture of chloroform and camphor liniment.

The following afternoon I found that she had recovered the power of speech, but the leg was nowise altered.

Then with a view of testing a strong suspicion, I pulled down the bed-clothes, and in a very positive tone told the child to "straighten out that leg." She looked at me quite vacantly, but took no heed of my injunction. After this I opened a pocket bistoury, and told her if she did not straighten her leg I should have to cut off part of it. Still not the slightest effort at moving, until with the fine point of the bistoury I gave her one or two pricks in quick succession, when she jumped out of bed, and ran around to her brother for protection, very much to the stupefaction of both parents, who witnessed the performance. After this no more lameness, and the well-being continues to the time of this writing.

A NEW NARCOTIC.

JAMAICA DOGWOOD, *piscidia erythrina*, is recommended in the *Pharmaceutical Journal* as a powerful narcotic, capable of producing sleep and relieving pain in an extraordinary manner. It has been used as an anodyne in toothache, curing the pain when introduced upon a dossil of cotton into the carious tooth. In Brazil it has an established reputation as a nervous sedative. Its action seems to be over the nerve-centers; it causes sleep without producing the cerebral hyperæmia which succeeds opium and the active principles extracted therefrom. The sleep is tranquil and refreshing; it soothes bronchial cough and moderates the paroxysm of asthma and nervous coughs. It has been used with success in chronic hepatitis and obstructions of the liver.

The idiosyncrasies encountered in many cases in regard to the action of opium and its alkaloids, compel the profession to seek an anodyne and hypnotic in other agents. We think this remedy worthy of a trial. The fluid extract is used in doses of five drops.

TR. FERRI MUR.

DURING the administration of the tincture of the chloride of iron, functional derangements of the stomach and liver often arise, with furred tongue, impaired appetite, headache, etc. These symptoms rapidly disappear upon adding one-half grain of the chloride of ammonia to each minim of the tincture. This combination is useful in cases of heart disease, accompanied by anæmia and debility.—*Boston Medical and Surgical Journal*.

CHRYSOPHANIC ACID IN SKIN DISEASES.

DR. I. NEUMANN records his further experience of this remedy in skin affections. He finds it useful not only in psoriasis and parasitic diseases (such as pityriasis versicolor, herpes tonsurans, eczema marginatum), but also in chloasma uterinum; treated with chrysophanic acid, the latter disfiguring affection may be

caused to disappear in a very short time. It exercises a favorable influence also on syphilitic skin diseases and lupus, and its effectiveness seems to be considerably increased by the addition of thymol.—*Glasgow Medical Journal*.

BORACIC ACID IN AMMONIACAL CYSTITIS.

BORACIC ACID has long been known to possess the property of preventing or retarding certain of the phenomena of fermentation and putrefaction. At the same time it is quite devoid of any toxic or irritating action, when absorbed into the system, or brought into contact with the tissues of the body. Hence its use in some countries for the preservation of meats for the table; hence its use in antiseptic surgery. Professor Polli, of Florence, has for several years been studying the chemical and therapeutical properties of this agent. Upwards of a drachm was administered daily, dissolved in water in the proportion of one part to fifty, without the production of any symptoms of intolerance. The drug is eliminated, unaltered, in the urine. Polli recommends its use in chronic cystitis, attended with ammoniacal decomposition of the urine within the bladder, and cites several cases in which this medication was beneficial.—*Boston Medical and Surgical Journal*.

OBSTACLE TO THE FINAL REMOVAL OF THE CANULA AFTER TRACHEOTOMY IN CHILDREN.

M. CARRIE calls attention to an obstacle in the removal of the canula after tracheotomy in children, which has not formerly been described. A tracheotomized child was seized with a fit of suffocation, just as the physician was attempting the permanent removal of the canula. He perceived in the depths of the tracheal wound a reddish prominence in the interior of the trachea, which was taken for fleshy vegetation of the posterior wall. The child died in a fit of suffocation. Prof. Guyon recognized upon the post mortem specimen sent him, that the projection regarded during life as vegetation was formed by the

posterior wall of the trachea itself, which was folded longitudinally in its entire thickness. This folding was itself due to the approximation of the posterior extremities of the tracheal rings, separated anteriorly for the introduction of the canula. M. Carrie after experiments concluded that this particular variety of constriction, which hitherto has not been pointed out, ought to be, nevertheless, rather frequent among children. It affects chiefly the first three rings of the trachea. The projection which results produces a tracheal constriction that may persist and prove an obstacle to the permanent removal of the canula.—*Arch. Gen. de Med.*, August, 1879.

AUSCULTATION IN UTERINE HEMORRHAGE.

PROF. DEPAUL in a clinical lecture (*Gaz. des Hosp.*) observes that when hemorrhage occurs during labor, it will generally be found to arise from partial detachment of the placenta, the cord being too short. "I remember," he said, "the case of a young woman whose delivery had gone on very well, when, as the head was approaching the vulva, two or three spoonfuls of blood suddenly appeared between the thighs. I immediately practiced auscultation, and found the foetal heart beating irregularly. It was evident that the infant was suffering, and that it was dangerous to await the natural termination of the labor which might last two or three hours longer. Dilatation was complete. Easily persuading the mother of the necessity of terminating the labor rapidly, I applied the forceps. Immediately after the child was extracted there followed five or six enormous clots, weighing about a couple of pounds. The child was born respiring with difficulty, but soon quite recovered. Never forget that whenever you meet with a flow of blood, to assure yourself by auscultation as to the state of the infant, and when dilatation has taken place, hasten to interfere whenever life seems in danger."—*Medical Times and Gazette*.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, October 7, 1879.

DR. LUCIEN HOWE, PRESIDENT, IN THE CHAIR.

Members present, Drs. Howe, Trowbridge, Samo, Moody, Hauenstein, White, Rochester, Cary, Johnson, Hartwig, Habenstein, Bartlett, Keene, Lothrop, Fowler, and, on invitation, Dr. Granger.

Dr. Mary B. Moody read an interesting paper on Placenta Prævia.

DISCUSSION.

Prof. White said he felt under obligations to his professional sister, for presenting the subject of placenta prævia so intelligently before the Association. Dr. White's remarks were confined to the treatment.

This unnatural birth is no longer left to Nature alone, but placed in the hands of art and successfully managed in the great majority of cases.

The plan recommended in the paper was that which he had practiced himself for a number of years, and which he believed was a great step forward in the treatment of placenta prævia and truly an American achievement.

In his instruction to his classes, he always urged that these cases be kept under the eye of the practitioner, when the presence of hemorrhage during gestation had admonished him of his danger. As soon as the child shows signs of viability, and the safety of the mother warrants, labor should be brought on. This had been called meddling midwifery. It is the surest way of protecting both the mother and child.

The life of the child would not necessarily be sacrificed at seven and one-half or eight months. It would be more liable to live, if delivered at this period, than at full time when profuse hemorrhage had preceded its birth, and the child delivered exsanguine.

Dr. White said he did not remember whether Dr. Thomas or himself practiced this method first. He remembered a case in which Dr. Rochester did him the honor to invite his counsel and assistance. An occasional hemorrhage during the last months of pregnancy led Dr. R. to suspect the presence of placenta prævia.

As soon as it was possible, they proceeded to deliver, which was accomplished without the loss of much blood. The patient sank back exhausted, and died a few minutes later. It was then ascertained that just previous to their visit, she entered the closet to urinate, and, while seated, passed what was believed to be liquor amnii, but what subsequent investigation proved to be a large amount of blood. If premature labor had been brought on early, her life would have been saved.

Another case he examined in consultation with Dr. Hauenstein. This case was reported in the last number of the JOURNAL.

Dr. Rochester remarked that he had met with eight cases in thirty-one years' practice. He spoke of a case of placenta prævia lateralis occurring about a year ago. When the lady had advanced seven and one-half months in pregnancy, he determined to induce labor. He was summoned hastily to see her, and found she had already lost considerable blood, and the hemorrhage still going on. He at once prepared to turn and deliver. He found the placenta partially detached. With little manipulation the head presented, the membranes ruptured, and the child was born dead. The lady made a good recovery.

Another case occurred about eight months ago. The patient's husband came in great haste, saying his wife was flowing badly, and he was afraid she would be dead on his return. He found her pale, almost pulseless, having lost an enormous amount of

blood. Applied the forceps at once, gave ergot, and delivered her of a large lifeless child. Her husband was directed to press firmly on the uterus with both hands, which he did, after the child was born. The placenta fell out of its own accord, and the lady recovered.

Dr. Hauenstein said he presumed it would be expected that he should make some remarks upon this subject, having gained a considerable local notoriety in consequence of the frequency of his cases, numbering in all eleven, and what seems most remarkable and almost incredible to the profession, six of these occurred in a period of eight months. What he should say would be confined to the manner of treatment. So many methods having been proposed and recommended, physicians are confused if suddenly called upon to treat a case. He thought it best to be familiar with some definite plan of treatment. He believed, with Dr. White, that the induction of premature labor to be good treatment, but did not think it could be applied indiscriminately to all cases. But 60 pr. ct. show any tendency to hemorrhage before the eighth month, and in others hemorrhage does not occur till labor comes on.

He would induce premature labor a month or six weeks before full period in all cases, when the nature of the hemorrhage clearly indicated the existence of placenta prævia.

Placenta prævia lateralis does not usually give rise to a great amount of hemorrhage. Cases, in which there is a continued leakage from the uterus, can often get along by giving ergot, and when labor comes on and the head presents, the efforts of Nature are usually quite sufficient to complete it. Another point, which should put the physician on his guard, is the liability to post partum hemorrhage, following placenta prævia.

Dr. Hauenstein said he was indebted to Greenhalgh for the idea of covering the rubber bag with cotton, and he believes he also suggested the induction of premature labor, when placenta prævia existed eleven years ago, and when labor comes on and the head presents, let Nature take the natural course.

Dr. Samo said he had been very much interested in Dr. Moody's paper. He inquired if it had been observed by those present that placenta prævia is prone to recur in the same individual.

Dr. Bartlett said his experience had embraced 7 cases, or about 1 in 300 labors. He believed that cases of true central placental mifflautation were very rare.

He was called not long since to see a Mrs. Foster, on Elk street, who had a midwife in attendance. He found that she had been bleeding profusely; her extremities were cold and her temperature $95\frac{1}{2}^{\circ}$ F. Ergot was at once given and the fingers crowded upwards, through the os uteri, dilating it. He found the child high up in the uterus, and the cord pulseless. The child was brought down at once, and delivered.

A sponge was dipped in a solution of per sulph. of iron, and a cord attached to it, and passed to the fundus of the womb; the uterus immediately contracted. The sponge was afterwards expelled; the temperature rose to 104° F.; the woman recovered.

Mrs. O'Day, on Chicago street, sent for me not long ago in great haste. On my arrival, found her flowing and very weak from loss of blood. The cord was pulseless, and the uterus not inclined to contract. The hand was introduced in the uterus, the child turned and delivered. She made a good recovery. Of the children, all were lost; the mothers were saved.

Dr. Hartwig said he had one case occur in his practice. He would induce premature labor if the patient could be under his constant observation.

For tamponing, he used cotton batting dipped in a solution of tincture of the chloride of iron and water, and dried before using.

As a voluntary communication, Dr. Hartwig reported a successful case of ovariectomy, the lady being pregnant about six weeks at the time she was operated upon. She miscarried at four and a half months, and recovered.

Dr. Bartlett mentioned a young man suffering from typhoid fever, with a temperature of 105° F. He was apparently doing well, when suddenly the temperature fell to 97° F. It remained at this point for several hours, when a large amount of blood was expelled from the bowels. His temperature again went up, and following the use of ergot, tannin, and hydrochloric acid, he recovered. He thought a sudden fall of temperature in this disease might be made a useful diagnostic point in concealed hemorrhage.

Dr. Rochester mentioned the occurrence of urticaria, caused by eating freely of peaches.

Some diphtheria was reported prevalent in the eastern part of the city.

EDITORIAL.

MIDWIVES.

THE subject of midwives, in its relations to the medical profession and the public, is one of so great importance that we have no apology to offer in presenting it for the consideration of the readers of the JOURNAL. The position of the midwife is one of great responsibility. Admitting that many times parturition is a purely physiological process, even here meddlesome midwifery is capable of doing much harm; and it is generally admitted that ignorance and officiousness go hand-in-hand. Considering the great responsibility of the midwife when in the discharge of her duties, one, unacquainted with the facts, would naturally presume that there must exist sufficient legal safeguards prohibiting any, but those well qualified, from assuming the duties of the accoucheur. This, however, is quite far from the truth.

Prior to 1874, there was practically no law upon the subject. In the spring of the year mentioned the Legislature, then in session, enacted the following law:

CHAPTER 436.

AN ACT TO REGULATE THE PRACTICE OF MEDICINE AND SURGERY IN THE
STATE OF NEW YORK.

Passed May 11, 1874.

*The People of the State of New York, represented in Senate and Assembly, do enact
as follows :*

SECTION 1. Every practitioner of medicine or surgery in this State, excepting licentiates or graduates of some medical society or chartered school, shall be required, and they are hereby commanded, to obtain a certificate from the censors of some one of the several medical societies of this State, either from the county, district or State society; which certificate shall set forth that said censors have found the person to whom it was issued qualified to practice all the branches of the medical art mentioned in it. And such certificate must be recorded in a book provided and kept for the purpose by the County Clerk of each county in the State.

§ 2. The censors of each medical society aforesaid shall notify all practitioners of medicine and surgery of the terms and requirements of this act, and shall request such persons, so notified, to comply with those requirements within thirty days after such notification; and if such persons shall not, within the time specified in the notice, or within such further time as may be allowed by special arrangement with said censors, not exceeding ninety days, comply with the requirements herein made of physicians or surgeons, as the case may be, such persons shall thereafter be subject to all the provisions and penalties prescribed by this act for any violation of the same, and the president of the society making such request shall and he is hereby required to at once commence the proceedings authorized by this act against such person.

§ 3. It is hereby declared a misdemeanor for any person to practice medicine or surgery in this State, unless authorized so to do by a license or diploma from some chartered school, State board of medical examiners, or medical society, or who shall practice under cover of a medical diploma illegally obtained; and any person found guilty of such a misdemeanor shall, for the first offense, be fined not less than fifty nor more than two hundred dollars; for any subsequent offense, not less than one hundred nor more than five hundred dollars, or by imprisonment not less than thirty days, or by both imprisonment and fine; and all such fines shall go into the county treasury of the county bringing such action.

Assuming that a midwife is a practitioner of medicine or surgery, the law, as it now stands, would appear to be quite equal to the requirements of the case. This, however, has not proved to be so. Shortly after the above law became a part of the statute, the censors of the Medical Society of the County of Erie notified a number of irregular practitioners, and soon supplemented this by commencing legal proceedings against the

parties. These proceedings, in accordance with legal advice, were almost immediately discontinued; the opinion being that, under the loose reading of the present law, a conviction could not be expected. So far as we are aware nothing has since been done or attempted.

That the average midwife is entirely unqualified for the intelligent discharge of her duties goes without saying. We have in the course of our practice met with many forcible illustrations. Time and time again, when we have been called to rectify a supposed cross-birth, it has proved to be a head presentation. Again we have been sent for to apply the forceps when the os was not perceptibly dilated, and real labor did not come on for a number of days. As we all know, these illustrations might be multiplied almost without end. Nor is this to be wondered at. It is the natural result of the state of things which allows any woman, whose privilege it has been to witness a half-dozen confinements, to assume the duties and responsibilities of an attendant to the parturient. Many, many lives are annually lost as a result of this ignorance, and many more rendered permanently miserable.

In conclusion, as a remedy for these evils we would suggest first, that physicians once more unite in the effort to pass a bill which shall be so worded, and otherwise sufficient, that under it convictions may be procured; and secondly, that schools be instituted for the instruction of those desiring to become midwives. For this a model might be obtained in the present schools for nurses throughout the country, and of which we have one in this city, in connection with the Buffalo General Hospital. That such schools are practicable is seen in the fact that similar schools have long been in existence in Germany and other European countries. In connection with the various Charity Organizations, no difficulty would be found in providing means for practical instruction and study. With schools of this kind, issuing diplomas certifying to the qualifications of the graduates, there would no longer be an excuse for the imposition now practiced.

MORTALITY TABLE.

CONDENSED from National Board of Health Bulletin for the four weeks ending Sept. 27th, 1879.

CITIES.	Estimated Population.	Deaths.	Death rate per 1000.
BALTIMORE, - - - - -	400,000	557	18.10
BOSTON, - - - - -	365,000	514	18.30
BUFFALO, - - - - -	170,000	113	7.97
CHICAGO, - - - - -	460,000	634	17.92
CLEVELAND, - - - - -	160,000	189	15.36
LOUISVILLE, - - - - -	175,000	223	16.54
NEW YORK, - - - - -	1,097,000	2025	23.00
PHILADELPHIA, - - - - -	901,000	1099	15.85
ROCHESTER, - - - - -	90,000	*57	16.36
ST. LOUIS, - - - - -	500,000	424	11.02

* Only two weeks reported by National Board of Health.

THE BUFFALO MEDICAL COLLEGE.

THE regular session of 1879-80 opened Oct. 8th, Prof. J. F. Miner delivering the introductory address. The attendance of the profession, and also of students, was large. The address was one of the ablest efforts of our late editorial confrère. The medical class is an unusually large and promising one. Its numerical proportions have peculiar significance in view of the movement to extend the course, and to establish a system of more frequent and thorough examinations. This improved feature, we took occasion to refer to in commendatory terms in our last number. It is in response to the demand of the profession for a higher standard of medical education, and we heartily indorse the efforts of the Buffalo Medical College in this as in every effort to this end. We trust, also, that its faculty, who are justly ranked among our most liberal and progressive men, will stop only when they have established a complete graded course of medical study, such as Harvard now offers, and Bellevue intends to establish.

REVIEWS.

Treatise on Hygiene and Public Health. Edited by ALBERT H. BUCK, M. D., American editor of Ziemsen's Cyclopeda of the Practice of Medicine, Instructor in Otology in the College of Physicians and Surgeons in New York. New York: Wm. Wood & Co.

This work is in two large volumes of 792 and 657 pages respectively. The first volume is made up of a series of articles written by men deservedly eminent in the medical profession, and is divided into two parts, the first being devoted to the subject of Individual Hygiene, part second to Habitations. The volume opens with a concise and thoughtful article from the pen of Dr. Billings, Vice-President of the National Board of Health, in which, after some prefatory remarks, he dwells upon the Causes of Disease and the Jurisprudence of Hygiene. This is followed by a series of five papers, of which space will allow us to give their titles only, viz.: Infant Hygiene, by Dr. Jacobi, Professor of Diseases of Children, College of Physicians and Surgeons, New York. Food and Drink, by Dr. James Tyson, Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania. Drinking Water and Public Water Supplies, by Professor W. R. Nichols, of Massachusetts Institute of Technology. Physical Exercise, by Dr. A. B. Ball, of New York. The Care of the Person, by Arthur Van Harlingen, Chief of the Clinic for Diseases of the Skin, Hospital of the University of Pennsylvania.

The articles in part II are: first, a paper on Soil and Water, by Dr. W. H. Ford, President of the Board of Health, Philadelphia, Pa.; second, an article on *The Atmosphere*, by D. F. Lincoln, M. D., of Boston, in which the subject is studied under the four heads of: I, Natural Components of Air; II, Impurities; III, Meteorology and Climate; and IV, Ventilation and Heating. The volume closing with an article, written by Dr. Francis H. Brown, of Boston, on the General Principles of Hospital Con-

struction. These papers are very instructive and valuable, and should be read and studied not only by Physicians and Sanitarians, but by all educated persons.

Volume II is also divided into two parts, under the general titles of Occupation and Public Health. Dr. Roger S. Tracy, Sanitary Inspector of the Board of Health, New York, contributes the first article on The Hygiene of Occupation, and this excellent paper is followed by the following, all equally well written :

The Hygiene of Camps, by Charles Smart, M. B. C. M., Assistant Surgeon, U. S. Army.

The Hygiene of the Navy and Merchant Marine, by Thos. I. Turner, M. D., Medical Director, U. S. Navy.

The Hygiene of Coal Mines, by Henry C. Shaefer, Coal editor of the *Miners' Journal*, Pottsville, Pa.

The Hygiene of Metal Mines, by R. W. Raymond, Ph. D., editor of the *Engineering and Mining Journal*, New York City.

The second part of volume II opens with valuable articles on Infant Mortality and Vital Statistics, by Thos. B. Curtis, M. D., Surgeon to out patients, Massachusetts General Hospital.

The well-known chemist, S. P. Sharples, Inspector of Milk for the City of Cambridge, contributes a first-rate article on the Adulteration of Food.

The fourth article is on Public Nuisances, and was written by Roger S. Tracy, M. D., Sanitary Inspector of the Board of Health, New York.

Then follows Quarantine, with reference solely to seaport towns, by S. O. Vanderpoel, M. D., Health Officer of the port of New York.

Inland Quarantine, by S. S. Herrick, Secretary of the Louisiana State Board of Health.

Small pox and other contagious diseases (scarlet fever, measles, whooping cough), written by Allen McLane Hamilton, M. D., Sanitary Inspector of the Board of Health, New York, and Bache Emmett, M. D., New York City.

The Hygiene of Syphilis, by F. R. Sturges, M. D., Clinical Lecturer on Venereal Diseases, in the University of New York, etc.

Disinfectants, by Elwyn Waller, Ph. D., Chemist to the Metropolitan Board of Health, New York.

Village Sanitary Association, by Roger S. Tracy, Sanitary Inspector of the Board of Health, New York.

An article on the important subject of School Hygiene is well written by Dr. D. F. Lancaster, of Boston, and this closes a work the great value of which will be immediately recognized by scientific physicians, and could it enter the house of every man of education, and there receive the study and attention which it deserves, the work would be of incalculable benefit. In the crowded state of our pages, and especially in this department of book reviews, we can not, in justice to ourselves, or the authors, attempt a review of the separate papers, but every one of them is worthy of study. Some of them are very elaborate, and all are thoughtful and suggestive on topics relative to the health and well-being of the community. As a whole, the book can receive nothing but favorable criticism. It contains a fund of useful and trustworthy facts and conclusions, which possess permanent value. Every subscriber to Ziemssen should complete that great Cyclopædia by obtaining this work, and every educated man should buy this first really comprehensive treatise on private and public Hygiene, written with special reference to the different climates, conditions of soil, habitations, modes of life and laws of the United States. Messrs. Wood & Co. are entitled to much credit for the admirable dress in which the work is presented. The type is large and the paper excellent, and illustrations have been freely introduced. D.

"Eye Sight and How to Care for It."

This is a very large name for a very small book. The author, Dr. Harlan, presents the subject in a popular manner; however,

the illustrations are good, and altogether this volume of the "American Health Primers" must prove as acceptable to the public, and as profitable to Lindsay & Blakiston, as are the others of the series.

H.

The National Dispensatory. Containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines; including those recognized in the Pharmacopœia of the United States, Great Britain, and Germany. With numerous references to the French Codex. By ALFRED STILLE, M. D., LL. D., Prof. Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania, and JOHN M. MAISCH, Pharmaceutical Doctor, Prof. of Materia Medica, in the Philadelphia College of Pharmacy. Second Edition, thoroughly revised, with numerous additions. Philadelphia: Henry C. Lea.

The first edition of this great work appeared only a few months ago, and that the publishers should find it necessary to issue a second edition in the same year, is most conclusive evidence that this work has really supplied a want felt by the medical and pharmaceutical profession. The authors have taken advantage of this opportunity for revision, and though, in the short time that has elapsed since the first edition appeared, nothing really new or important has been brought to light, still some valuable additions and alterations have been made, and the errors and imperfections in the first edition, which it is only justice to say were marvellously few for so large a work, have been corrected.

The book is now a handsome octavo volume, of 1672 closely printed pages, with 239 illustrations. The material embodied in the work is truly immense, as shown by the almost countless number of subjects treated. It is now, undoubtedly, the most perfect book of its kind in any language.

D.

Analysis of the Urine, with special reference to the Diseases of the Genito-Urinary Organs. By K. B. HOFFMANN, Professor in the University of Gratz, and R. ULZMANN, Docent in the University of Vienna. Translated by T. B. BRUNE, M. A., M. D., and H. H. CURTIS, Ph. B. New York: D. Appleton & Co. Buffalo: Ulbrich & Kingsley.

This work enjoys a well-deserved popularity in Germany and Austria, and already it has been translated into three languages.

That it is likely to be appreciated in America, is shown by the fact that two translations of it have appeared here.

In a recent number of the *Journal*, we reviewed the book as translated by Dr. Forchirmer, and published by a Cincinnati house. The work now on our table is published by D. Appleton & Co., and its appearance is worthy of their reputation. It is printed in large clear type, on excellent paper, and the book is made doubly valuable to the student by the admirable plates. These do not appear in the German edition, but have been taken from photographs furnished by Dr. Ultzmann, and from the author's "Atlas der Physiologischen und Pathologischen Harnsedimente." In noticing Dr. Forchirmer's translations, we spoke highly of the work, and again we commend it to the attention of the student and general practitioner, and we would advise our friends to secure the work with the Appleton imprint. D.

A Guide to Surgical Diagnosis. By CHRISTOPHER HEATH, F. R. C. S., Surgeon to University College Hospital, etc. Philadelphia: Lindsay & Blakiston.

The object of this little book is to assist the student of surgery in forming a diagnosis of cases coming before him, and it will without doubt be a useful book for the student to have in his pocket during his clinical lectures and studies in the hospital. The book is arranged in twenty-five chapters, each of which treats of the diagnosis of diseases occurring in one of the surgical regions. No attempt is made to discuss the pathology or the treatment of any of the disorders described. The book contains many tables, for instance, about differential diagnosis of inguinal tumors, femoral tumors, scrotal tumors, etc., by which arrangement the usefulness of the book can but be increased. M.

The Advantages and Accidents of Artificial Anæsthesia. By LAWRENCE TURNBULL, M. D. Second edition. Philadelphia: Lindsay & Blakiston.

This monograph cannot fail to be of unusual interest to every intelligent practitioner, in spite of all that has been written on

the subject. The principal anæsthetic agents are taken up in order, and the important features of each carefully discussed. The various indications for using or avoiding them, together with the manner and probable cause of death in unfortunate cases, are pointed out in detail. The book is written in the same clear style which pervades the "Diseases of the Ear," by the same author, and if a physician were to read only the chapter on ether and chloroform, he would find himself well satisfied with his bargain.

H.

Modern Surgical Therapeutics. A compendium of current formulæ, approved dressings and specific methods for the treatment of surgical diseases and injuries. By GEORGE H. NAPHEYS, A. M., M. D., etc. Sixth edition. Revised to the most recent date. Philadelphia: D. G. Brinton. 1879.

It is but a few months since we called the attention of our readers to Dr. Napheys' Medical and Surgical Therapeutics, works which go hand in hand with each other, and together comprise the present therapeutics of both medicine and surgery. The sixth edition has been enlarged and improved, and will add to the value and great popularity of the work.

J. F. M.

American Health Primer. The Summer and its Diseases. By JAMES D. WILSON, M. D. Philadelphia: Lindsay & Blakiston. 1879. Buffalo: Butler.

The contents of this little work are comprised in seven chapters, of which the first treats of summer; second, sunstroke and heat fever; third, summer diarrhœa and dysentery; fourth, cholera infantum; fifth, summer and autumnal fevers; sixth, summer colds and hay asthma; seventh, the skin and its diseases.

A great amount of valuable information for the prevention, as well as cure of disease, is condensed in its pages, which will be of great benefit to the general reader. The general practitioner also who desires a small work, elucidating general principles of sanitary science, will find in this work a useful guide.

L.

On Loss of Weight, Blood Spitting and Lung Disease. By HORACE DOBELL, M. D., etc., etc., consulting Physician to the Royal Hospital for diseases of the chest, late Senior Physician to the Hospital, etc, etc. Philadelphia: Lindsay & Blakiston.

The author discusses, with great care and earnestness, the questions of what is the import of loss of flesh and loss of blood, or hæmoptysis as prodromata of tuberculosis or consumption. He says, "the interdependence of loss of weight, blood spitting and lung disease is so intricate that, although either may occur without the others, neither can be properly treated without considering the rest." The discussion on these questions is comprehensive and complete. Eight hundred cases, as they occurred in the Royal Hospital, are reported, and a chart showing the relation between loss of weight, coughs, blood spitting and lung disease in one hundred male cases of hæmoptysis accompanies the work, and adds to the force of the text.

J. F. M.

The Heart and its Diseases; with their treatment, including the Gouty Heart. By J. MILNER FOTHERGILL, M. D., Member of the Royal College of Physicians of London, etc. Second edition. (Entirely re-written.) With illustrations. Philadelphia: Lindsay & Blakiston. 1879. 476 pp.

The author in his preface claims that while the literature on heart disease "contains the systematic works of Hope, Stokes, Walsh, and our American confrère Flint, scientific progress may have made room for a newer treatise." Acting upon this belief, he essays to add another to the many important works already published on cardiac diseases, and we think the task has been successfully accomplished. The present work constitutes a really valuable treatise, which will be cordially received by the profession, and be regarded as an important addition to our literature on cardiac disease. There are many features in this work which are especially commendable. The author strives to describe each form of disease of the heart, not as a combination of signs and symptoms, but as possessing a natural history.

Indications for treatment are thus furnished, which are based on philosophical principles. The author pays a merited tribute of praise to his German and English co-laborers, and recognizes the rapid progress made in placing cardiac pathology and therapeutics on a sound scientific basis.

L.

The Student's Guide to the Diseases of Women. By ALFRED LEWIS GALABIN.

M. A., M. D., F. R. C. P. With sixty-three illustrations. Philadelphia: Lindsay & Blakiston. 1879. Buffalo: Butler.

This work aims to present to the student of medicine, within the limits of a small volume of 370 pages, a condensed account of the diseases peculiar to women. We object, as a rule, to a treatise upon so broad a subject as Gynecology, which can scarcely touch upon the salient points of the pathological conditions it endeavors to elucidate. The author has, however, succeeded in simplifying many subjects, and by aid of illustrations shows the practical method of performing many important minor operations. But he treats so briefly of many diseases, that his conciseness robs several chapters, devoted to very important subjects, of the clearness of description so essential to the student for whose especial benefit the work is written. At the same time the work contains much to commend. Of its kind, it is the best we have read, and if carefully studied, as an introduction to this important department, to be supplemented by a more thorough examination and study of the larger works of Barnes, Byford, Thomas and Emmet, recognized all over the world as authority in this field of professional labor, it will subserve a very useful purpose in guiding the student to sources of knowledge, from which, for a time, he may chance to be denied access.

L.

Notice.—The Books and Surgical Instruments belonging to the Free Medical and Surgical Dispensing Association of Buffalo will be sold at *Public Auction*, on Saturday, November 8th, 1879, at the Museum of the Buffalo Medical College.

M. B. FOLWELL, M. D.,

President Board of Directors.

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

PULMONARY DISEASES OF ELEVATOR EMPLOYEES.

BY THOS. F. ROCHESTER, M. D.,*

Professor of Principles and Practice of Medicine, Medical Department
University of Buffalo.

IN all great industries, whether commercial or manufacturing, there exists, of unavoidable necessity a condition of life or mode of living almost sure to develop a peculiarity and class of disease, incident to the labor of the employees. This is especially noticeable in all mining enterprises—in workers in metals, and in the operatives of cotton and woollen mills—as also in those of flouring mills, and they have formed the subject of many interesting papers; but the writer is not aware that the case of the “scooper” has ever received more than passing notice in the discussions of this and other medical societies. In order to present the matter properly, it is necessary to premise that there are twenty-five elevators, and five floating elevators in this city. The former employ from fifty to one hundred men

* Read before Buffalo Medical Association, Nov. 5, 1879.

each; the latter from fifteen to twenty-five, each. It is probably a low estimate to state the total number of "shovelers" to be fifteen hundred. They work in gangs of from twenty-five to fifty, under the direction of a "boss shoveler," who is usually also their landlord, deriving from this latter avocation a large part of his income, as he provides not only board and lodging, but also keeps a bar for the *accommodation* of his boarders and their friends. The meals are generally good and abundant. The sleeping apartments are close rooms and crowded lofts, with but little attention to ventilation or cleanliness. Some, however, are very much better than others in this respect. A considerable number of the men live with their families in their own tenements, but the larger proportion board as above described. The work consists in the removal of grain from vessels and cars to elevators, and from the latter to cars and canal boats. This was formerly done by hand-shoveling alone, but latterly the steam shovel, a most ingenious labor-saving invention, is generally employed, but requiring in its action a large amount of accessory work by the hand-shovel; as many as fifty men often laboring at once, in connection with it in the hold of a large propeller. Inquiries have failed to elicit the exact temperature sometimes undergone in this work, but an intelligent foreman of one of the largest elevators said it was often very high, especially when the large overlying boilers were full of very hot water, as was generally the case. Besides temperature, absence of fresh air, and dirt and dust and minute particles of grain, especially when bearded, are to be considered as factors of disease. But these are as nothing, and perhaps unavoidable, as compared with the great destructive feature now to be mentioned, and which must strike with surprise and awe, and even horror, those unfamiliar with it, viz., the often long-continued, unintermittent time of work. As to this, it is but fair to state that employers and foremen deny the statements made by the employees. The former assert that no gang ever works continuously for more than thirty-six hours, and that in some of the largest elevators

never more than twelve hours, while the workmen have again and again, assured the writer with the most solemn assurances, that they have toiled consecutively for six and seven days and nights, stopping only very briefly for meals and drinks, and snatching now and then from five to ten minutes of sleep between the arrival and departure of cargoes. If this assertion is true, it is a much greater test of physical endurance than any of the shameful pedestrian exploits now so much in vogue, which really are catch-penny exhibitions, alike pernicious to the walkers and the lookers-on, and a disgrace to humanity and civilization. The truth probably is, that the shovelers occasionally exceed the longest time admitted by their employers, and rarely, if ever, attain that which they most persistently assert. To the inquiry, What do your men drink? the answer was very prompt and decided: "Mostly whisky, and when they can get it, ten or twelve times a day—some take only beer, and a few only tea or coffee." Which do the best? "The latter, and then the beer-drinkers; the whisky men do the worst."

The work is singularly intermittent. In busy seasons even, some gangs will be several days without anything to do, and a large portion of this idle time is spent in drinking and in various dissipations, and therefore it is, when a job is secured, it is pushed. The wages, for mere manual labor, are high, being so much per thousand bushels, generally \$3.75 to \$4.00. At these prices, a few days of hard work put a considerable amount into the pocket of the "scooper." He is, however, with but few exceptions, improvident; and a short number of idle days exhausts his store. Some, indeed, lay up for the coming winter, especially those with families, but the proportion of those who do this is lamentably small. With but few exceptions the men are Irish, many of them young and but recently arrived, and this fact is to be borne in mind when we consider that the Irish in this country (and especially the young), and perhaps also at home, are very prone to lung affections. There are a few Americans of Irish parentage, a few Germans, and

occasionally a representation of other nationalities. Soon after a new man commences work, he experiences catarrhal, nasal and throat irritation, and he may labor through a whole season with nothing more than this. He is apt, however, to develop bronchitis, involving the larger, and eventually the smaller tube, and bronchioles. It is generally of a sub-acute character, rarely eventuating in capillary bronchitis, and is unattended with febrile movement or other indication of active inflammatory action. It is chiefly important to consider this condition with reference to its ultimate results, it being the ground-work for subsequent serious disease. It occasionally happens, however, that more dangerous disorder is developed after short exposure, in the form of active broncho-pneumonia, and this particularly where there is any tubercular proclivity. The second and third years are, however, fruitful of morbid effects, not uninfluenced by the idle and dissipated life of the intervening winter. It is then that the hospital becomes a necessity—and there is found every grade of a peculiar class of pulmonary disorder, ranging from uncomplicated bronchitis to broncho-pneumonia, with a considerable amount of pleuritic complication, and these associated almost invariably with great disturbance of the renal, hepatic and digestive functions. Both lungs are usually implicated. Pure pneumonia is rarely met with, but there is a great deal of hypos-totis, and a semi-solidification of the posterior portions of both lungs is common, generally more extensive in the right than in the left. The pulse as a rule is frequent and feeble, the heart beats tumultuously rather than strongly, except where it is hypertrophied, which is quite often found to be the case. The skin is usually moist, sometimes as much so as in delirium tremens, of which it often reminds the examiner. The temperature varies considerably, averaging about 103° , with very little diurnal range as respects morning and evening. It is sometimes as high as 106° , and in others does not rise over 101° . In the more severe cases delirium, particularly nocturnal, is often manifested. It is usually low and muttering, but occasional instances of 'the

mania a potu type are encountered, giving rise to a suspicion at least of delirium tremens complication. Generally there is great dyspnœa and a good deal of cough. The expectoration varies from slight muco-purulent to rusty and hemorrhagic, and is often copiously purulent and fetidly offensive, the breath giving off the same odor. From first attacks recovery, at least partial, is the rule, but convalescence is very slow, and is often interrupted by recurrence to some extent of serious symptoms, made manifest after slight exposure or indiscretion, or coming on spontaneously without being attributable to any exciting cause, and probably proceeding from new local pulmonary infiltration engorgement or softening. An attack of what is called in the hospitals elevator pneumonia usually ensures, for the subject, a ward residence of at least three months. Such persons are always advised to find some new field of labor, and if they do so not infrequently recover entirely, becoming robust and vigorous; but unfortunately they sometimes can find no new work to do, and are compelled to do what they can, while others, regardless of consequences, or skeptical as to warnings, attracted by the fellowship of gang-work, and by the lure of large wages, go back to their haunts of work and of dissipation, and soon fall victims to acute or chronic pulmonary disorder. Many of them have all the general symptoms of pulmonary phthisis, such as cough, purulent expectoration, emaciation and night sweats; but physical exploration fails to detect the true tubercular lesions, except in a few. In these, however, its progress is rapid, owing to the superinduced broncho-pneumonia and its influence in hastening destructive tubercular changes.

Post mortem appearances. Although the mortality is considerable, no very larger number of pathological observations have been made. Where death occurs at the home or boarding place it is impossible to obtain an examination, and nearly as difficult at the hospital, relatives, friends and especially the working associates, always claiming and carrying away the body soon after its demise. A continuous hospital service of twenty-six

years has afforded a few post mortems. One or both pleuræ are generally adherent, and are red and thickened with more or less of false membrane. It is rare to meet with pleuritic effusion. The lungs are red, heavy and engorged in their lower and posterior portions, also soft and pulpy, and on being cut across exude frothy, bloody, creamy and purulent fluids. Occasionally deep blood-red infarctions in considerable number are found, and still more rarely an abscess of variable size, with now and then a considerable number of small pits of pus, the apparent effect of scattered spots of lobular pneumonia. The lining membrane of the larger bronchial tubes is, without exception, swollen and thickened, and covered with a thick tenacious muco-purulent secretion—this is also found in the trachea and larynx. The pericardium usually contains from one to three ounces of serum, often blood-stained, and the heart is pale, flabby and softened, and generally enlarged. In many instances fatty degeneration of liver or kidneys, or both, is noted, and it is not unusual to find considerable fluid in the abdominal cavity. No special lesions are detected in the intestinal tract, but the bowels very often contain a noticeable number of lumbricoides.

TREATMENT.

The most dependence is placed upon the change effected by removal to the hospital, cleanliness of body and bed, enlarged and purer air space, although, in a ward, abundance of concentrated nutriments, with pure milk ad libitum, with alcoholic stimulants as required, sometimes considerable being necessary, but usually only a small amount and for a few days; quinine, according to temperature and effect; carbonate of ammonia, freely in almost every case; opium, mostly in the shape of Dover's powder, in small doses, but avoided where there is great dyspnœa with lividity of surface; tr. of chloride of iron, especially where the breath and expectoration are offensive, appears to be of great service; it is often advantageously combined with chlorate of potash. Sinapisms and large hot poultices, the latter surrounding

the chest, are the only external applications. They seem to be very effectual in relieving pain and distressed breathing. Many a patient nearly moribund has appeared to be rescued by the large hot jacket. Strychnine, camphor, and the ethers are found useful when the heart needs sustaining, and this is very often the case. This is indicated by feebleness of impulse and by weakness of first sound. Daily cardiac auscultation should never be omitted; prognostically it is more important than any other examination. This paper will close with a few further remarks, the first one certainly startling. The average duration of the "scoopers" life is five years. It has been computed as low as three. It is true that there are men who year after year follow this labor until they become too old to pursue it further, but these are very rare. It is noticeable that those who commence it at thirty-five or forty years of age bear it much better than those who begin at twenty. This is probably explicable on the hypothesis that it is the healthiest period of human life, and that at this time the body is much less susceptible to morbid impressions than at earlier and later epochs of existence. That the average mortality has not been overstated, reference is made to a very recent speech of J. H. Dormer, Esq., long doing business in the neighborhood of the elevators, and made still more practically familiar with the subject by his long, earnest and devoted labor in connection with the Charity Organization. In advocating the establishment of a creche, he especially emphasized its great need for the relief and aid it would give to that most numerous class, the widows and orphans of the elevator shovelers. Our duty as medical men is plain. We have in our midst a body of laborers, who, by their work, contribute largely to our commercial prosperity, but at a terrific sacrifice of health and life.

The remedy seems to be plain and simple. Does it not consist in regular and shorter hours of continuous labor, in a sanitary regulation of lodging and boarding houses, and in as far as possible a limitation in the use of ardent spirits? This, on proper

representation, can be accomplished as to hours of work by the owners of elevators, as to lodging and boarding houses by the keepers of the same, in co-operation with the municipal Board of Health. The whisky problem will be the most difficult to solve; it could be rendered much easier if the bars of boarding houses could be closed. But this would be very difficult to accomplish. The subject has been laid before you, and the writer will be most happy to hear your discussion upon it, and to co-operate most heartily in any feasible plan for diminishing the evils to which your attention has been called.

THE EFFECTS OF CHRONIC PURULENT INFLAMMATION OF THE MIDDLE EAR.

BY LUCIEN HOWE, M. D.

IN the August number of this Journal the writer reported some results of the treatment of chronic purulent inflammation of the middle ear, by means of the permanganate of potassa; and the favorable reception given to that article is the only excuse for so soon presenting another on a similar topic.

Since, if it is well to record observations indicating a reliable method for controlling this disease, it can hardly be of less interest to call attention to its results, when left uncared for. These are apparently so obvious and often considered of so little importance that they may seem hardly worthy of serious consideration.

The popular notion is unfortunately too prevalent that a discharge from the ear will surely cease, and that temporary deafness or a disagreeable odor is the only disadvantage accompanying it. Moreover, even physicians are occasionally heard to intimate that it should not be "meddled with," for if suddenly arrested, it may "strike in upon the brain."

The fallacy of thus mistaking cause for effect will be referred to presently, but such remarks only show that no opportunity

should be lost to state the truth, and fortify it by examples. For practitioners who know this disease best, are those who fear it most. If there is any one topic concerning which authorities are thoroughly agreed, it is in regard to the evil effects of a long-neglected purulent discharge from the middle ear.*

In regard to this disease Sir William Wilde says: "We can never tell how, when, or where it will end." The chapter concerning it is one of the best in his excellent work, and together with other writers, he has presented the subject so clearly and so forcibly as to leave but little for any one else to say. It would be useless, therefore, to go into the detailed consideration of pathology and treatment, which can easily be found, in any text-book on the ear. But it seems that the effects of this disease might be made prominent by simply describing a few cases. Examples similar to those which will be referred to have imbued writers with the strong convictions they often express, and perhaps others will make the same deductions when the data are thus enumerated.

It will be understood, of course, that the accompanying cases are illustrative of the results which occur not ordinarily, but only in exceptional instances—some of them very rarely. A few of these have already been referred to in the article on permanganate of potassa, as being incurable by that method, or as becoming discouraged before any conclusions could be drawn as to its effect. The others were treated differently, or were seen before any systematic trials were made with that remedy.

Before specifying these cases, however, it may be well to recall for a moment the anatomical relations of the part under consideration. It will be remembered, of course, that the cavity called the middle ear is situated on the inner side of the drum-head that membrane forming its outer wall. In the normal condition this is a structure of extreme tenuity, and when dissected out resembles a piece of tissue paper, but when thickened by inflammatory processes, may become quite firm and resisting.

* St. John Roosa, *Diseases of the Ear*, page 369.

Opposite the drum-head, we find on the inner wall of the cavity a thin layer of bone, which separates the labyrinth from the middle ear, and also two openings into the internal ear, one of which, in fresh preparations, is closed by the secondary membrana tympani, and the other by the oval plate of the stapes. This inner wall at one portion separates the middle ear from the facial nerve, and at another, where, moreover, it is often perforated by innumerable openings for vessels and nerves, it constitutes the main barrier between that cavity and the carotid artery. On the anterior wall we find principally the orifice of the Eustachian tube, and posteriorly the mastoid cells, which also open into this cavity.

The lower wall or floor is usually formed by a thin plate of bone, but not infrequently it is partly or wholly membranous, while just beneath it lies the jugular vein. The roof is still more important, separating as does the middle ear from the brain.

When describing this portion, Dr. Burnett says: "This osseous partition is very thin, and in some cases congenital fissures in it persist; in such instances the only boundary at the dehiscences, between the tympanum and the cerebral cavity, is formed by the mucous membrane of the former, and the membranes of the brain. It is evident that in such cases pathological processes in the drum cavity are especially liable to pass upward to the brain."*

The cavity of the middle ear, with the chain of delicate bones contained in it, is, therefore, placed in the closest proximity to portions of vital importance, and we might infer a priori that a suppurative inflammation of its lining membrane would not only prove detrimental to hearing, but injurious to the contiguous structures.

For by the term chronic purulent inflammation of the middle ear, we understand such a morbid condition of the mucous membrane lining that cavity as can be found also in other portions of the body. In an early stage it is injected, swollen and

* A Treatise on the Ear, Burnett, page 79.

covered with a glairy fluid, and then, as the catarrhal stage becomes more advanced, accompanied by symptoms more or less acute, the secretion may assume a distinctly purulent character.

For awhile the pus remains shut up within the walls of the tympanum, except as a portion oozes out through the Eustachian tube. But ordinarily, the walls of that passage become also swollen by the irritating secretion which flows through it, until this single door of escape becomes closed, and then with symptoms of varying intensity the accumulating fluid pushes in the direction of least resistance. The drum-head is usually the first one of the six walls to give way, a foetid discharge is poured into the outer canal, and a purulent inflammation is fairly established, which may afterwards become "chronic."

And this process is invariably a destructive one. The longer it lasts the greater the detriment to the ear, and the less the prospects for improvement. In considering the evils which follow this disease, it is perhaps well to mention first the impairment of hearing. This varies as to degree and duration, according to the extent which the process has reached. In some instances it is principally due to the vibrations of the drum-head being impeded by an accumulation of secretion.

The use of a syringe will at once improve such cases. But more frequently the difficulty in hearing is dependent upon the extensive destruction of the membrane, or upon a diseased condition of the chain of bones. A perforation of the drum-head does not, however, necessarily produce deafness. The error of this notion was proven by Sir Astley Cooper long ago.* Cases continually occur in which only a portion of the drum-head remains and the person is still able to hear quite well.

On the other hand, where the perforation is very small the deafness is sometimes extreme, being due to an impeded action of the chain of bones, or to other results of the inflammation.

The following case illustrates this condition: A girl, 14 years old, was brought to me on the 12th of October, from Le Cou-teulx St. Mary's Institution for the instruction of deaf mutes.

* Philosophical Transactions of the Royal Society of London, 1801.

When a child, nothing unusual was observed in regard to her hearing. About 10 years ago an inflammatory disease of the ears began, which assumed the purulent form, became chronic, and finally left her entirely deaf. An examination showed the drum-head on each side to be considerably swollen and perforated, but in neither ear was the opening much more than a millimeter in diameter. She had, however, become a deaf mute, and even the vibrations of the tuning fork, when placed on the forehead, could with difficulty be perceived as a sound. Moreover, it appeared upon inquiry that this was not the only inmate of the same institution whose unfortunate condition could be traced to a similar cause. The Sister of Charity in charge very kindly furnished me with such information as could be gathered from the records and otherwise, and it appeared that out of 132 pupils, nineteen had suffered from the disease under consideration, and that in twelve of these cases the discharge still persisted. Together with the impairment of hearing, the patient is always troubled by the disagreeable odor of the secreted pus. Those who have one good ear remaining are often more annoyed by the discharge than by the deafness. In most instances it is simply troublesome, and can be, to a great extent, obviated by frequent washings and by filling the ear with a plug of cotton; but occasionally the stench becomes intolerable.

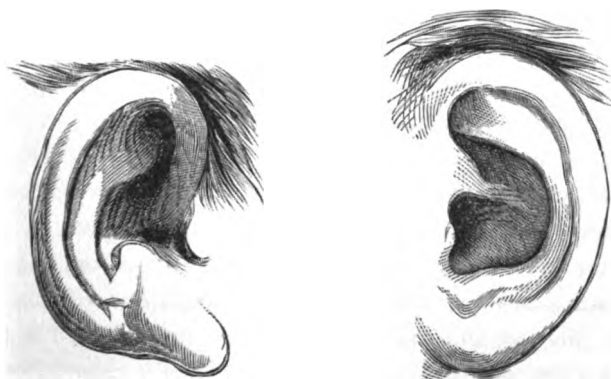
In June, '78, a boy applied for relief at the Buffalo Eye and Ear Infirmary, who had been twice sent away from school on this account. Although the disease affected only one ear, the atmosphere in his immediate vicinity was positively sickening, and even at a distance of several feet from the child the perfume was painfully apparent.

Besides the disagreeable odor of the discharge, it is frequently of an irritating character. An eczematous eruption may appear about the auricle, or ulcerations be produced, with their consequent cicatrices and deformities.

Such a result was observed in a patient who applied at the Infirmary on the 23d of last August. A boy, Robert R., eight

years old, complained of a discharge from the right ear, which had lasted for about three years. It appeared, from the account given by the mother of the patient, that the exuded pus varied somewhat both as to quantity and quality, and at times seemed to be particularly irritating.

The resulting condition, as regards the auricle, was rather unique, for when the two were compared they were as unlike as though belonging to different individuals. That on the left side was rather large, well shaped, and with a wide opening for the meatus. On the right side, however, the helix and anti-helix were drawn forward, the concha narrowed, the anti-tragus raised almost perpendicularly, giving the lobule an elongated appearance, while the opening for the meatus was contracted into an oval fleshy ring, which measured only five millimeters in the horizontal diameter and four millimeters vertically. A mucous polypus, moreover, occupied most of the canal. Altogether it seemed that such a case was worthy of being recorded rather more exactly than by simple description, and accordingly, a photograph was taken of each auricle, from which the accompanying wood cuts were copied. And just as the pus is injurious to external parts, so does it affect the structures, as already intimated, which are situated within, or contiguous to, the cavity of the middle ear.



CONTRACTION OF THE MEATUS IN A CASE OF CHRONIC OTORRHOEA.

The mucous membrane being the part primarily involved, naturally suffers most. Not only does it become engorged and swollen, but projecting outward, a portion may push through the opening in the drum-head and thus form a polypus. In the great majority of cases there are soft masses of tissue (mucous polypus) "being produced," as Swartz says, "by a hyperplasia of the tympanic mucous membrane."* Occasionally, however, as the chronic purulent discharge continues, the periosteal layer of the middle ear develops abnormally in a similar manner, and pushing outwards, protrudes externally as a dense yellowish tumor—a real fibroma.

I have found these much more difficult of removal than the more common mucous polypi, and apparently with a marked tendency to recur.

A typical case of this sort presented itself at the Eye and Ear Infirmary, on the 31st of May, 1876. The patient, J. L., was otherwise a healthy young fellow, complaining only of the deafness and offensive discharge, for about two years. For some weeks past he had noticed "that lump" growing out from his ear, and an examination showed it to be a fibroma. An attempt was made to remove it in the usual way with Wilde's snare. This, however, proved so difficult and painful that on June 4th the patient was chloroformed, and assisted by Dr. Herman Mynter, I cleared away the entire mass, by means of the snare and forceps. The pedicle which protruded through the perforation in the drum-head could be easily seen, and its surface was cauterized with nitrate of silver.

The patient did not return again till the 27th of December, during which time the fibroma had grown to its former size, and the condition of the ear otherwise was as bad as ever.

As another result of long-continued discharge from the middle ear, it sometimes happens that the articulations of the ossicles become softened, and the detached bones are lost. The following case illustrates this :

*The Pathological Anatomy of the Ear—Schwartz.

In July of 1875 I was consulted in regard to G. W., the six-year-old son of a clergyman in this city. The father stated that on the first of January of that year the patient showed symptoms of scarlet fever, which in due time developed into a severe type of that disease. On the 12th day both ears began to discharge, and continued from that time to secrete an acrid pus, frequently mixed with blood. About the first of April one of the bones of the right ear was accidentally found on the patient's pillow. Another subsequently lodged in the external canal, and finally the family physician, Dr. S. W. Wetmore, obtained the entire set, as beautifully cleaned by long maceration as though they had been boiled in a solution of caustic potash. Meanwhile the other ear had become affected to a similar degree, and the child was reduced practically to the condition of a deaf mute.

The results of the disease thus far considered, with the exception of the loss of function, manifest themselves externally. When, however, the accumulating pus cannot find exit along the usual routes, then the consequences may be still more serious. By its effect upon the Aqueductus Fallopii, a paralysis of the facial nerves may be produced; by infiltrating the mastoid cells, a destruction of that portion of the temporal bone may result; and finally, the death of the patient has not infrequently been observed by the transmission of the disease to the adjoining brain substance.

Let us consider the paralysis first. This is, of course, usually produced by a breaking down of the thin partition between the cavity of the middle ear and the canal for the facial nerve. But it has been pointed out by Gruber and others, that this result occurs also without any affection of the bone, by simply an infiltration, either serous or otherwise, into that canal, "or even through pressure from the side of the middle ear."* Although questions may thus arise as to the exact manner in which the lesion may occur, it has unfortunately been too often proven, from clinical experience and post mortem examinations, that such paralyzes do result from a purulent in-

* Gruber—Lehrbuch der Ohrenheilkunde, page 540.

flammation of the middle ear. The following case shows how rapidly and completely this effect may be produced :

A young man, J. D., 19 years old, living at 483 Hickory street, applied to me Feb. 27, '78. His history, as written by himself and repeated by his father, was substantially as follows:

About six months previously, when traveling with a circus troupe, he began to suffer from a severe attack of "ear ache" on the right side. This, together with symptoms of malarial character and "fever," was sufficient to confine him to bed for a few days, during which time a similar process began in the other ear. As the pain subsided, an acrid and profuse discharge ensued, which continued in the left for about two months, and still persisted in the right.

Meanwhile the hearing was lost almost entirely, ordinary conversation could not be perceived at all, and the loudest tone was distinguished only as an indefinite sound. But a complication of hardly less importance was the paralysis of the right facial nerve. The eyelid was displaced, the corner of the mouth partly open, and the entire side of the face presented that vacant and stupid expression characteristic to this affection.

This, of course, is an unusual example. The canal, containing the nerve, is usually so thoroughly separated from the middle ear as to make such results quite rare. An inflammation and partial destruction of the mastoid cells is, however, more common. It will be remembered that they communicate directly with the cavity just mentioned, and a morbid process in one could be transmitted to the other, as, for example, in the following case:

J. L., a bright little girl five years old, had suffered since the middle of last May with a discharge from both ears—profuse and constant in the right, scanty and intermitting in the left. About the middle of September a mucous polypus developed in the right side, almost occluding the external canal, and later, an abscess formed behind the same ear and was allowed to open of its own accord. A repetition of the same process began soon

after, and on the 29th of October, when the child was brought to me by the family physician, Dr. Loomis, the entire vicinity of the mastoid was swollen, tender and fluctuating. I therefore opened the abscess, allowing considerable pus to escape, and as the point of the knife struck the hard surface below, it passed along, giving that roughened, or gritty feel, peculiar to dead bone.

Finally, a chronic purulent inflammation of the middle ear has more than once taken on an acute form, and resulted in the death of the patient. Thus far, I have fortunately had no opportunity of seeing a case of this kind, but the testimony of others would tend to show that such examples occur to most practitioners of considerable experience. Nor is it at all surprising, when we remember how intimately the middle ear is related to structures of vital importance, especially the brain.

Concerning this, Turnbull* says: "The tissues adjoining the mastoid process, viz., the dura mater, the internal carotid artery, and internal jugular vein with the transverse and lateral sinus, are so important, that a morbid process which spreads to them from the middle ear is fraught with danger to life, independently of the circumstances that the sense of hearing may be weakened or entirely annihilated."

Burnett† says: "It becomes, therefore, the duty of every conscientious practitioner of medicine to be carefully observant of the onset of an inflammation in the mastoid cavity, and prompt to relieve it; for by so acting, he will, in all probability, save life where in similar cases there is every reason to know that death has occurred."

Dr. Albert H. Buck, one of the editors of the *American Journal of Otology*, considers the existence of such a disease, in certain instances, a sufficient cause for rejection of an applicant for life insurance, because, "these individuals, besides having to run the same chances of death, from diseases and accident, which other men must run, are afflicted with a local inflammation in very

*Lawrence Turnbull, *Diseases of the Ear*, page 195.

†Loc. Cit. page 545.

close proximity to the brain, an inflammation which may at any time excite a fatal meningitis, or by involving the veins of the neighborhood, lead ultimately to an embolism of some important arterial trig, or to the equally serious condition of septicæmia or pyæmia.*

It is only necessary to examine casually the literature relating to otology to assure one's self, from clinical histories and from post-mortem appearances, that fatal results of the disease under consideration are by no means so very rare. It would be out of place here to enter into bibliographical detail, but a few references to such cases may tend to show why they are to be regarded with suspicion.

The fact has long been recognized that a purulent inflammation of the middle ear may endanger life, but especial attention was directed to the subject by Von Troltsch,† whose unusual opportunities for extensive observation enabled him to collect fifteen cases of fatal otorrhoea, the dissections of which were carefully described.

About the same time‡ Dr. E. H. Bennet showed to the Pathological Society, of Dublin, two specimens illustrative of the fatal results of caries of the temporal bone. In Turnbull's "Diseases of the Ear" he reports the cases of a child and a young girl who died from the same cause; the diagnosis in both instances being confirmed by post-mortem examinations, and in Dr. Charles Burnett's work, about four pages are entirely devoted to the enumeration of articles "pertaining to the fatal results of neglected otorrhoea, caries of the mastoid, and the parts of the temporal bone, and operations on the mastoid portion."

Taking into consideration, therefore, such a series of observations, it would indeed appear that purulent inflammation of the middle ear is not, after all, such a simple affair as many are apt to regard it. The impairment of hearing, and disagreeable character of the discharge, are, at least, annoying to the patient,

*Medical Record, volume X, page 287.

† Archiv für Ohrenheilkunde—Bd. IV, Heft II.

‡ British Medical Journal, Dec. 24, 1870. Medical News, Philadelphia, Feb., 1871.

and occasionally render him unfit for ordinary vocations. The resulting polypi, the paralyses, or inflammations of the bone, are of even more importance, and finally statistics indicate that a certain proportion of neglected cases terminate in the death of the patient. Such facts as these seem to be sufficient reason for thus reiterating and illustrating the results which sometimes follow a neglected otorrhoea.

CLINICAL REPORTS.

TRAUMATIC ANEURISM.

LIGATION OF THE FEMORAL ARTERY—GANGRENE—AMPUTATION—
HOT WATER TREATMENT IN TRAUMATIC GANGRENE—CLINICAL
REMARKS BY C. C. F. GAY, M. D., SURGEON TO THE BUFFALO
GENERAL HOSPITAL.

REPORTED BY FRED. PETERSON, M. D., HOUSE SURGEON.

THOMAS GRABNER entered the hospital January 17th, 1879; aged 23; American; married; butcher.

While at work with an ordinary butcher-knife, the instrument accidentally slipped, making a penetrating wound in the inferior portion of scarpa's triangle and injuring the larger femoral vessels in the vicinity. This had occurred eighteen days before admittance to the ward. A false aneurism had formed, and after a consultation, Dr. J. F. Miner cut down upon it. The incision was made from Poupart's ligament, eleven inches in length toward the inner tuberosity of the femur. About a pint of coagula was removed. In three days secondary hemorrhage took place and the femoral artery was ligated close upon, or a little beneath, Poupart's ligament. The leg seemed to improve for several weeks and the long incision healed rapidly, while the collateral circulation had every appearance of being established.

March 1. Service of Dr. Gay. The great toe had sloughed to such a degree that amputation was necessary, and the lesser

toes gradually assumed the same gangrenous condition. Hot water irrigation was recommended by Dr. Gay and a continuous stream, at a temperature of 130° to 140° Fahr., played upon it night and day until the 26th of March, manifestly *delaying* the fatal progress. March 23d, two other toes were pulled off. Ultimately, however, the heel and dorsal surface of the foot lost vitality, more it seemed from innervation than from paucity of blood, for the circulation was good and the temperature of the leg and foot always from 1° to 2° higher than that of the healthy extremity. A consultation of the hospital staff, March 20th, decided in favor of amputation, but considered it proper to delay the operation for a little time to see if there might be any improvement.

March 27. Dr. Gay amputated in the presence of the Staff at the junction of the upper with the middle third, making a good, healthy stump. Three days afterward the bandage was removed, and the posterior flap found gangrenous but with a line of demarcation within an inch of the margin. His pulse was too frequent to be counted. His temperature varied from 103° to 105° Fahr. Stimulants and nutritious diet were ordered. Morphine gr. ½ every two hours was taken for a few days. The stump was immersed in water at a temperature of 100° to 110° Fahr.

April 5. The ligature about the femoral was removed, and with difficulty, after having remained there nine weeks.

April 13. The stump was removed from the water and poulticed with flaxseed until the 16th inst., when healthy granulations were visible. Was given ferri et quinas citras gr.v=gr.v three times daily. Simple cerate dressing was now recommended to be used.

May 3. Tried grafting, putting in seven points of skin taken from the arm; it was a failure. Two small pieces of bone have come away.

June 12. Patient has grown fat, is able to sit up and has been for many weeks, and now only awaits the tedious process of the skin covering the stump. Grafting was repeated, and the stump covered.

REMARKS OF DR. GAY AT HIS CLINIC.

The case of Grabner possesses much interest. At the time of the first consultation the patient wore a tourniquet loosely applied to the femoral artery; the thigh was distended from infiltration of blood; the penetrating wound was outside the line of the superficial femoral artery; there was pulsation and the characteristic aneurismal thrill. No thrill was heard over the artery of the opposite limb. Thrill has been known to be present, sometimes, upon both sides when there was aneurism only upon one side; and this is a clinical fact of some interest. There could be no reasonable doubt of the presence of either true or false aneurism.

In cases of aneurism, I regard it most desirable to establish collateral circulation, if possible, previous to ligation.

My aneurism compressor is so constructed that elastic pressure can be applied, and the circulation wholly or partially shut off in the artery to which the instrument is adjusted without ligating the limb.

An interesting clinical fact as any other, probably, in connection with this case, is that of the efficacy of the hot water treatment in traumatic gangrene.

Upon the subject of the employment of hot water in surgery, Dr. Hamilton has reported many cases, some of which I regard as not entirely test cases, and would have ended in recovery undoubtedly without the use of hot water. But in the case of Grabner we present a test case, and there can be no doubt about the character of the disease, nor of the efficacy of the remedy in saving the patient's limb and life, so that we may depart from our usual custom and say: here is a patient "cured."

After complete immersion of the leg for a few days in hot water, pretty uniformly maintained at a temperature of 107° to 110° Fahr., the progress of the gangrene was arrested.

Fomentations and irrigation, as employed in this case, previous to amputation, are not the most effective ways of using hot water as a remedial agent. Irrigation was effected by placing

a pail of hot water two feet above the limb, through the bottom of which was a hole for the passage of a rope of wicking, which was to convey the water to the limb. Of course, the temperature of the water was considerably lowered during its transit from the pail to the limb.

After gangrene had made some inroads upon the amputated limb, not only the stump, but a portion of the thigh also, was submerged in a tin trough of hot water. The efficacy of the hot water treatment is, probably, dependent upon complete and continuous submersion, and to this method is attributed the final arrest of the sloughing.

A CASE OF ANGULAR CURVATURE OF SPINE TREATED BY THE PAPER-AND-GLUE BRACE.

REPORTED BY BERNARD BARLOW, M. D.

MENTION in the last number of your JOURNAL, of the paper-and-glue spinal brace of Dr. Morgan Vance, has led me to think that the report of a case of angular curvature of spine in a child, two-and-a-half years old, in which this brace has been used, would be of interest to the profession, as exemplifying a few of many advantages claimed for this apparatus over that of plaster of Paris.

The patient has been attended jointly by Dr. Jno. Hauenstein and myself, and first came under the notice of the former gentleman the 9th of June last, when he observed an angular curvature of the spine of one-half inch projection posteriorly, involving the last dorsal and first lumbar vertebræ. The dorsal and lumbar curves of the spinal column were also to a large degree obliterated—the child's back presenting a flat appearance, from which the angle formed by the diseased vertebræ projected sharply. There was evidence of absorption of inter-vertebral substance.

The history of the case showed that it was one of an acute character and due to constitutional causes, not injury. The child had been backward in development and strength, never having walked, though able to stand with the support of a chair, etc. The mother noticed the curvature of spine three days previous to consulting Dr. H.; during three or four weeks previous to that time the child had had occasional diarrhœa, lost considerably in flesh and strength, and was irritable and restless in an unusual degree.

The obviously acute character of the disease, and the dependence upon it of the child's condition, suggested prompt measures for the prevention of deformity, if not of an unfavorable issue in the case. Being too young to be placed in a suspensory apparatus, the patient was suspended by the hands of an assistant placed in the axillæ. The plaster of Paris corset was then (June 12th) applied; care being taken to protect all prominent points, including curvature from pressure. The effect of this appliance was to relieve at once the irritability the child suffered through the unsupported spine, and although it was a heavy and hot appliance for one so young, and gave rise to a good deal of general discomfort, was otherwise well borne; with the addition of cod-liver oil and iron the patient improved perceptibly. The jacket was worn six weeks, and upon its removal a slight abrasion was found over the point of curvature, necessitating a delay of a week before another could be applied. During this time the child was kept upon her back and none of the advantage was lost that had just been obtained. No change had taken place in the degree of curvature. A second corset was applied and the child was then taken into the country, but it was necessary to bring her to the city, and remove the bandage at the end of three weeks, owing to an exploded percussion cap having, by some means, gotten between the corset and the patient's skin, causing a slight ulceration. On account of the difficulty of applying plaster of Paris in the case of one so young, the tenderness of the child's skin and the danger of continuous pressure upon prominent points, and the dis-

comfort from wearing an apparatus in hot weather that did not admit of frequent removal and cleansing of the child's person, the necessity of some appliance admitting of these features was a desideratum with us.

The paper-and-glue spinal brace of Dr. Vance came to our notice at that time through the columns of the *BUFFALO MEDICAL AND SURGICAL JOURNAL*, and it was at once adopted and made, and when completed, found to be an elegant apparatus of its kind; combining the properties of firmness, lightness, and ventilation in a high degree; affording perfect support to the spine, and admitting of removal and re-adjustment with great ease. It might be mentioned here that the time necessary for its construction, as mentioned by Dr. Vance, is erroneous. Two persons of average expertness will consume at least four hours in the making of the cast and the subsequent application of the paper, glue and steel springs; but this is compensated for by the ease of application and longer time that the brace can be worn. Dr. V. states the actual working time to be one and a half hours.

This brace was applied to the patient August 15th, and has been worn two months; the mother has removed it every night, and has thus been able to bathe the child, greatly promoting rest and refreshment. It is applied before the child rises in the morning—in fact she refuses to move until it is put upon her, and cries for it when for any reason it is removed from her during the day-time. The good result of its use is seen in the complete arrest of the spinal curve, the ability of the child to walk by taking hold of another's hand, and increase in flesh, strength and good spirits.

The tender age of the patient, the acuteness of the disease, the greater readiness with which the apparatus was borne, and its being at least equally as efficient as the plaster of Paris bandage in controlling the disease, are strong recommendations for its use in cases which do not present as many difficulties as are met with in the treatment of this case.

PERITYPHLITIC ABSCESS, TREATED WITH ASPIRATION THROUGH RECTUM.

REPORTED BY E. D. MERRIAM, M. D., CONNEAUT, OHIO.

The BUFFALO MEDICAL AND SURGICAL JOURNAL was particularly welcome when, on the reception of the October number, I perused the very interesting article on Perityphlitic Abscess, by Dr. Herman Mynter. I had just diagnosed a case in my own practice, which I regard of sufficient interest to relate. I was called to see Charles Salisbury, Sept. 25th, 1879; aged 19 years; found pain and tenderness in the right ileo-cæcal region, which, for the first few days, extended considerably over the abdomen, but under hot fomentations and anodynes, the general peritonitis subsided, leaving a circumscribed tumefaction with pain and tenderness in the right iliac region. The fever was not high, nor the pulse above 100 at any time during the whole course of the disease. A blister applied on the eighth day drew well, and by the eleventh day the tumefaction was diminished, and at the same time, dysuria, with some distention in the pelvic region, was making its appearance; the bowels moved without pain; urination frequent, painful and scanty; on the twelfth and thirteenth days there appeared a slight watery and mucous discharge from the rectum, and by digital examination, per rectum, fluctuation was discovered by pressing at the right side of the rectum, about two and a half inches above the anus; on the fourteenth day, assisted by Dr. Fifield, I punctured the abscess through the rectum with the largest needle of Dieulafoy's aspirator, and drew off one and three-fourths pints of fetid pus, the last ounce of which was somewhat mixed with blood, indicating the thorough evacuation of the cavity; from this time the patient made a speedy recovery, and was discharged in two weeks. The point of special interest in this case to me was the fact that not a drop of pus was discharged after the first evacuation of the abscess. The immediate closing and healing of so large a cavity was unexpected.

TRANSLATIONS.

THE METHOD USED IN GERMANY IN THE TREATMENT OF PLACENTA PRÆVIA.

ABSTRACT OF PROCEEDINGS OF THE BERLIN GYNECOLOGICAL ASSOCIATION (GESELLSCHAFT FUER GEBURTSHUELFE) OF JANUARY 23, 1877.

TRANSLATED BY LOUIS SCHADE, M. D.

PROFESSOR SCHRAEDER says: As regards the occurrence of bleeding in connection with placenta prævia, the views of Duncan that the placenta detached itself in consequence of transverse tension of the internal os and the parts adjacent (by which tension the attachment became larger while the placenta retained its original size), did not seem to him to explain every case, nor did it necessarily explain the hemorrhage. In normal births, where the membranes have ruptured at the proper moment, the ovum must partially detach itself from the wall, and this last must draw itself back over, the ovum. This separation takes place usually in decidua, sometimes, however, between chorion and amnion. In this case the chorion is torn, remains attached to the wall of the uterus, and the amnion alone constitutes the membrane. After delivery of the foetus one finds both separate. If now, by placenta prævia centralis, the ovum remains intact, the internal os must force itself up on the placenta, and in consequence of this, the projecting portion becomes apparently larger. A separation between amnion and the chorion is almost impossible on account of the position of the umbilical cord. As soon, however, as the membranes break, the wall of the uterus ceases to draw itself up on the placenta. From this it appears that the earliest possible rupture of the membrane must be the safest check to the bleeding, and indeed this treatment has had the best results. It is a mistake to suppose that the bleeding can be stopped by compression of the presenting portion. In a few of the cases

treated in the lying-in hospital, the bleeding ceased immediately on rupturing the membrane, although only a thigh lay in the orificium uteri, which did not at all fill it out. A forced birth is, however, not advisable, as the cervix in placenta prævia, although it may be dilated, is also easily ruptured.

Dr. Bennicke has, in nine out of twelve cases, treated in the city, ruptured the membrane early; then by a combined version pulled down a foot, and then allowed nature to finish the delivery. The twelve women lived, also four of the children.

Dr. A. Martin ended forty-one cases operatively, and lately has advocated as the safest the treatment herein prescribed. He recommended the rupture of the membranes because the disadvantage of the tampon, especially the infection, is thereby avoided. The cervix is not always easily dilated; for instance, he once saw a case of rupture occurring during the passage of the head, and by which the woman bled to death. He tried, only once, Kleinwaechter's method to loosen the placenta considerably, and then to inject ice water, and with bad result.

After the birth of the child the placenta must be immediately removed. Against post-partum hemorrhage he recommends injection of hot water in the uterus.

Dr. Jacquet expresses himself also in favor of early rupture of the membrane and of combined version.

ATROPHY OF THE OPTIC NERVE IN ERYSIPELAS OF THE FACE—BY PARINAUD.

TRANSLATED FROM THE FRENCH BY LUCIEN HOWE, M. D.

AN erysipelas of the face may be followed by impaired vision which sometimes shows itself only in one eye, and occasionally affects both simultaneously. In either event, after a longer or shorter time, an atrophic degeneration of the optic disk becomes apparent.

The writer has observed such a result in two cases, and has collected six others from medical literature, which leave no doubt

as to their relation with the erysipelas. After detailing his own observations, he gives an analysis of the other cases, seeking by their comparison the cause and signification of this grave complication. From that it appears that the impaired vision which results under these circumstances is accompanied or followed by atrophy of the optic nerve. The neuritis (acute stage) has not, however, been recognized in any instance.—(*Arch. Gener. de Medicine.*)—*Annales d'Oculistique.*

UNANIMO CONSENSU.

TRANSLATED FROM THE DANISH BY HERMAN MYNTER, M. D.

THREE medical professors in Lisbon, Bento de Sause, Martins and Cabral, have published an account of a celebrated case of an exhumed corpse, to decide whether the deceased had hung himself or had been strangled. The three experts mentioned declared for the latter alternative, but found ardent opponents in three members of the faculty of Coimbra, according to whose declaration the jury acquitted the defendant.

The professors, at Lisbon, applied in a joint letter to experts in medical jurisprudence in all countries of Europe, gave them the matter at issue, and asked them to give their opinion. The physicians asked were: Hoffman, of Vienna; Aloys Martin, of Munich; Guillery, of Brussels; Gaedeken, of Copenhagen; Bergeron and Tardieu, of Paris; Pallis, Geonganlas and Arphanides, of Athens; y Vivo, of Barcelona; y Mendoza, of Cadiz; Yanes, of Madrid; de Myer, of Utrecht; Bristowe, Crosby and Taylor, of London; Romati, of Bologna; Lazzaretti, of Padua; Pacchiotti, of Turin; Herberg, of Christiania; Mando and Pinto, of Coimbra; Vianna and Pitta, of Lisbon; Osonio, of Ponto; Liman, of Berlin; Tchitowitsh and Lenz, of St. Petersburg; Jaederholm, of Stockholm; Gurmert, of Bern. The answers from all these experts agreed that the party concerned "must be considered to have been strangled." Such an unanimity is both interesting and of importance, proving the high development of the science of forensic medicine.—*Hospitals-Fidenden.*

CUPRO-SULPHATE OF AMMONIA IN NEURALGIA OF THE FIFTH PAIR—BY FEREOL.

TRANSLATED FROM THE FRENCH BY LUCIEN HOWE, M. D.

THIS agent has been regarded as a sort of "specific" for epilepsy for some time—the anti-epileptic mixture of Weisman. In other neuralgias than those of the fifth pair, the writer has always been disappointed in its effects; but four such cases, in which it produced a good result, are especially mentioned. The symptoms of congestion, the epiphora and discharge from the nostril, were markedly relieved; but sometimes it produced a depressed condition of the vital forces, occasionally accompanied by nausea. The following is the method of administration:

℞ Ammoniated copper, grs. ii to iii.
 Syrup of orange flower or peppermint, ʒi.
 Distilled water, ʒiii.

To be taken during the day, in divided doses, about the time of meals. In spite of the metallic taste and the fetid odor of the breath, the dose of two grains in twenty-four hours ought to be continued for fifteen or twenty days.—(*Bulletin de Ther.*)—*Lyons Medicale.*

SELECTIONS.

REMARKS ON TWENTY-FIVE CASES OF SPLENOTOMY.

[In connection with Dr. J. F. Miner's recent operation, for removal of an enlarged spleen, an article by Prof. Czerney, translated by Prof. A. Barkaw, M. D., will undoubtedly be interesting to many of the readers of the JOURNAL; we therefore copy it from the *Pacific Medical and Surgical Journal*.—ED.]

PROF. CZERNEY, who succeeded the late Simon in the chair of surgery, at the University of Heidelberg, and may be considered as one of the foremost of young German surgeons, has recently

published a monograph on laparo-splenotomy, which contains the history of two cases operated on by himself, and some interesting remarks regarding the operation itself. Of twenty-five cases on record, six recovered (Zaccarelli, Forrerius, Pean (2), Martin, Czerney). Speaking of the condition of the patients, whose state of health was shown for a long period after the successfully performed operations, Czerney remarks: "The cases again prove the well-known fact that man is able to live without a spleen, without his functions undergoing an essential disturbance. The changes in the constitution of the blood are of such trifling nature, and soon pass away so completely, that they may be considered simply as caused by the operative proceeding. The passing swelling of the lymph-glands does not seem either to be a constant sequel of excision of the spleen, nor is there a constant anomaly to be found as regards the digestion of the patients. Neither bread and butter, nor potatoes, agree with my patient; whilst to the second patient of Pean, meat is distasteful. His first patient, as well as Martin's case, had normal digestion. If, then, the spleen possesses the great significance in the pancreatic digestion, as Schiff supposes, it is replaced through supplemental organs, in a way similar to that in which the excluded stomachic digestion is supplanted in the living dog. A striking feature is the greatly excited nervous condition of these patients. As to the benefit conferred by the operation, there seems to be no doubt that in these four cases the trouble and dangers caused by the movable or enlarged and painful spleen have been lastingly removed.

"The diagnosis of splenic tumor may offer considerable difficulties as regards the indication; the migration of spleen (*Undermilz*), according to present experiences, undoubtedly, demands removal of that organ as soon as the symptoms grow to be very troublesome, and not to be removed by bandages. So far as leukemic tumors of the spleen are concerned, we will now show, after thirteen sad experiences, that we should be very cautious. The latter stages when a hemorrhagic diathesis, a highly

cachetic condition, and an affection of the organs by the same disease, can be ascertained, are in the future to be excluded from an operation. The details of the operation can alone be decided by the results of the still rarely occurring cases of extirpation; the principles adopted in other abdominal operations, especially in ovariectomy, must be observed in laparo-splenectomy. I regard it as of the utmost importance to strictly enforce antiseptic rules: first, by using carbolic acid constantly but sufficiently, according to Lister's principles, to have an increased temperature of the rooms used for the operation, and to observe the general measures common in abdominal operation. Although surgeons of great experience, as Kuchler, Spencer Wells, and Ph. Bryant, make the abdominal section toward the side, yet I am in favor of Pean's cut in the median line. One has in that way the free field for action, as regards the possible presence of adhesions between the tumor and the concavity of the diaphragm. In such a case I would rather not give up the operation, but should consider it surgically justifiable to do as Tussenbauer did in his case of resection of the intestines, to make another incision through the abdominal walls, which, starting from the umbilicus at right angles with the median incision, should be carried into the left lumbar region.

"As to the second part of the operation, the drawing forth of the spleen from the abdominal cavity, Martin's case proves that one may meet with considerable difficulty with a small, migrating spleen. Slight adhesions can easily be separated by the hand. The separation of firmer adhesions may easily lead to laceration of the splenic tissue. I have, therefore, in my second case, first ligated the vessels in situ, and only after that detached the adhesions. Notwithstanding that the hemorrhagic diathesis being present, death ensued from loss of blood from the torn blood-vessel. If, therefore, the abdominal cavity has been opened at all in a case where there is hemorrhagic diathesis, and firm adhesions of the spleen are found, one will act wisely, in following Nedopil's advice, to close the abdominal cavity

again. It is best not to open it at all where there is such a condition present.

If the spleen has been delivered from the abdominal cavity, one must take care not to pull the pedicle too forcibly, as the thin-coated veins may easily be torn. For this reason I do not think a torsion of the pedicle (which caused the tearing of strong vein in Spencer Wells' first case), or the application of an *ecraseur*, advisable. Pean's second fortunate case, however, proves that, with great care, even an *ecraseur* may be used successfully. Nevertheless, it is my opinion that the best treatment of the pedicle consists in the ligature of the gastro-splenic ligament in mass, using well-disinfected silk, and sinking the shortly cut ligatures.

" Martin and myself were successful with this method. Pean also sinks, in his first case, the pedicle, which he had tied with four ligatures of silver wire. Martin correctly remarks that the extraperitoneal treatment of the pedicle is objectionable, because the traction of the stomach and large blood-vessels of the pedicle may lead to disagreeable consequences. If the silk which is to be used for ligature is previously coiled for half an hour in carbolated water, then cleansed in carbolated oil, it heals in the abdominal cavity without reaction. I have some reason to be pleased with this way of disposing of the pedicle in my ovariotomies. It depends upon the width of the pedicle in how many portions the filus vessels should be ligated. If, previous to detaching the spleen, all of the blood-vessels of the pedicle cannot be ligated, one must also apply peripheric ligatures, in order to prevent loss of blood from the lienal veins. If the pedicle be very short, I should not hesitate, as Billroth has proposed, to get the tail of the pancreas into a ligature. Martin recommends in such a case, rather to leave behind a (button) part of the lienal tissue, in order to prevent the sliding off of the ligature. The treatment of the other adhesions, the management of the peritoneum, the abdominal suture, and after treatment, differ in no way from the same process in ovariotomy.

NITRITE OF AMYL IN AGUE.

DR. W. E. SAUNDERS, of Indore, calls attention to the value of nitrite of amyl in ague, and records a number of cases in which advantage has been derived from its use. The drug itself, he remarks, is inexpensive, and goes a long way.

He now uses *amyl nitrite* mixed with an equal part of *oil of coriander* to render it less volatile, and at the same time to cover its odor. He regards it as the most powerful diaphoretic he has seen, and he uses it in all cases of fever to produce diaphoresis.

The following is one of his cases: Mr. F. C. came for treatment about 7 P. M., in the cold stage of ague. Two minims of nitrite of amyl were administered. Sweating came on in seven minutes. He lay down for half an hour to get cool, and then walked home well. He, next morning, took a dose of quinine, and has had but one attack of fever without the cold stage since. Previous to this he had fever every day for one month, during which he took large doses of quinine.

Dr. Saunders observes that he does not mean to say that quinine should not be used in these cases, for there is ample proof that it tends to check the return of the attacks, and removes to some extent the septic condition of the blood, induced by the malarial poison, and this more especially if small doses of opium are combined with it. In no case did the amyl fail to remove the attack in about one-third the usual time, and in most cases the fever did not return. His method of administration is this: Four drops of the above mixture, or two of amyl, are poured on a small piece of lint, which is given into the hands of the patient, and he is told to inhale it freely. He soon becomes flushed, and both his pulse and respiration are much accelerated. When he feels warm all over, the inhalation is discontinued, as the symptoms continue to increase for some time afterwards. A profuse perspiration now sets in, which speedily ends the attack. In some cases, however, the cold stage passes off without any hot or sweating stage.—*Indian Medical Gazette in The Practitioner.*

VEHICLES OF MALARIA.

AGUE is commonly supposed to be due to the entrance of a miasmatic organism into the system. But no microscope has ever seen this organism, neither can we account for the intermittance of the ague paroxysms, nor can we say for certain through what way it finds its way into the system.

The majority of writers hold the opinion that *the air of marshes* is the sole cause of intermittent fever. But there exists strong evidence going to show that water, too, is a carrier of the poison. Take for instance two or three cases cited in the *Lancet*. First, the case recorded by Boudin, of three vessels sailing from Algiers to Marseilles, conveying 800 soldiers, who on shore had all been exposed to the same atmospheric condition. Two of these vessels were supplied with good water, but the third with water from a marsh. The two former arrived at Marseilles without a sick man, but the third ship lost thirteen men and had 120 sick, nine-tenths of whom were affected with malaria. Again, there is the outbreak of ague at Tilbury Fort, cited in Parkes' *Hygiene*, where thirty-four men out of a garrison of 103 were seized with ague, while the people at the railway station, and the coast guard men and their families just outside the fort, entirely escaped. The troops had been supplied with water stored in tanks, collected from the rain water of the roofs, while the people outside obtained theirs from a spring, the atmospheric condition in both cases being identical.—*Popular Science Monthly*.

THE FIRST INSENSIBILITY FROM ETHER.

FOR the short operations of minor surgery, and the reductions of dislocations, or opening of abscesses, it is extremely useful and of every-day application. Such a patient wishes to be operated upon without pain, or from being incapacitated from attending to business during the remainder of the day. He lies down upon the sofa, and with one hand places the ether inhaler, on a sponge

wet with ether, over his face, mouth and nose, and holds the other arm and hand up in the air.

This arm, after the ether has been breathed for a few minutes, will drop, and from thirty to fifty seconds of unconsciousness will be had, in which to operate. The sponge being removed, the patient is ready to go about his business. It gives rise to no headache, nausea, or other unpleasant symptoms, and is particularly useful in children. The chief source of disappointment is in not recognizing the right moment, for if this is allowed to pass, unconsciousness will not occur until full etherization. The first insensibility is sure to come. When the arm moves, be ready, and as soon as it drops perform the operation; no pain will be felt.—*Medical Times*.

VINEGAR AS A POST PARTUM HEMOSTATIC.

At a meeting of the American Gynecological Society, Dr. Penrose, in a paper on vinegar as a remedy in the treatment of post partum hemorrhage, presented the following advantages:

1. It could be easily obtained.
2. It could be easily applied, and instantly, without special apparatus.
3. It always cured the hemorrhage, at least it had not failed in his practice.
4. It was sufficiently irritating to excite the most sluggish uterus to contraction, and yet not so irritating as to be subsequently injurious.
5. It was an admirable antiseptic.
6. It acted on the lining membrane of the uterus as an astringent.

The remedy was applied as follows: saturate a rag with vinegar, carry it into the cavity of the uterus and squeeze it.

In the vast majority of cases the hemorrhage ceased as if by magic, when the vinegar passed over the surface of the uterus and vagina. It could be easily repeated if the first application failed.—*Cincinnati Medical News*.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, November 5, 1879.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

Members present, Drs. Moody, Abbott, Trowbridge, Bartlett, White, O'Brian, Brecht, Rochester, Hauenstein, Davidson, Harvey, Little, Hopkins, Wyckoff, Keene, Hartwig, Mynter, Johnson, Fowler, and by invitation, Drs. Granger and Kilbourne, and Mr. J. H. Dormer.

After the transaction of some routine business the Association listened to Professor Rochester's paper on "Pulmonary Diseases of Elevator Employees." (See Original Communications.)

In the discussion which followed, Professor White said: "Medical men are charged with an important duty of pointing out to the community evils which may affect the public health or that of any class of citizens. We should not only inform the public that a new disease has made its appearance among those engaged in a particular business, but should go back further, investigate its causes and suggest such measures as would tend to diminish its frequency or prevent it entirely."

He had long since recognized the existence of such troubles among elevator employees as were described by Dr. Rochester, but now for the first time heard the symptoms described and classified. He was of the opinion that the heated air, made poisonous by the want of a sufficient supply of oxygen, was as important a factor in the production of this form of pulmonary disease as dust.

The men, in large gangs, enter the holds of vessels preparatory to unloading, work hard for many hours in succession, without rest, or little, if any, food. He had long ago suggested that this class of laborers wear veils covering the face, which would, in a great measure, exclude the dust from the lungs, and that an

abundance of fresh air be forced in the hold, to replace the foul air and carry off a large amount of the dust. He believed, if the Board of Health could be made to appreciate the alarming fatality among scoopers, it might adopt measures compelling elevator owners to ventilate the holds of their vessels. There was no doubt in his mind that pulmonary disease was produced by such causes, and he was glad that Dr. Rochester had shown to what extent this class of laborers was obliged to endanger their lives.

Dr. Bartlett said during a practice of twenty-five years he had seen a great many of these cases, and urged the men to wear a sponge over the nose and mouth while shoveling, but he believed this had not been fully carried out, it being a source of much discomfort during active labor. He thought Dr. White's suggestion certainly worthy of consideration. These people usually live for the present and have no future; they are dependent on their employers and usually lead dissipated lives. The needle-grinders of Sheffield prefer a short life with good pay to a long one and small wages. These scoopers appear to entertain similar ideas.

Dr. Mynter fully recognized the fact that particular occupations predispose to special diseases. In the example under consideration he looked upon the dust as the exciting cause. Laborers at other kinds of work, in iron foundries for instance, often endure intense heat without permanent injury to health. When shut up in the hold of a vessel, the dust alone would be sufficient to produce serious consequences. The subject seemed to him one of much importance, and well worthy of the attention of the Board of Health.

Dr. Trowbridge's experience would force him to accord with the views of Dr. Rochester. He was quite conversant with the habits of this class of laborers. It so happened that he tallied the first load of corn shipped from Ohio to this port. As a surgeon of the Board of Enrollment, during the last war, he had noticed, more than once, the morbid condition described by

Professor Rochester. Whatever might be the immediate exciting causes of the trouble, he thought that the avarice of the employers, especially the "bosses," and the desire of the men for high wages and whisky, were important factors in the problem. The laborers usually boarded with the "boss;" he induced them to drink as much as they wished, and then worked them to death to get his pay. Until this system is changed, no amount of observation, or research, or philosophizing would have any permanent effect.

Dr. Davidson spoke of the value of the paper as an original contribution to sanitary knowledge. It seemed to him that the irritating particles, composing the dust, must be looked upon as the direct cause. Sponges over the mouth and nose were very good theoretically, but practically they were thrown away as too great an obstruction to the breathing. By the use, however, of such a respirator, as Tyndall has recommended, he thought the workmen might be caused to breathe air more free from the suspended matter.

Dr. Wyckoff was of the opinion that the hours of labor should be shortened, but realizes the difficulty of bringing this about as long as the demands of trade were so imperious.

Mr. Dormer, being called upon by the President, replied that he did not think much could be done to lessen the danger, unless the owners of elevators could be made to appreciate the importance of the matter, and their sympathy and co-operation secured.

He had observed that the hospitals provided for a great many of these people while ill, and the fatality among them was very great. When death or long continued sickness ensued, those dependent upon them for support were thrown upon the mercy of our charitable institutions. The Orphan Asylums and Old Folks' Home were largely filled with them, and the burden of taxation greatly increased in consequence.

Some time ago a committee was appointed by the Charity Organization Society to confer with the owners of elevators to make

arrangements whereby these evils might be corrected. A committee was appointed by them to consider the subject, but they have never moved in the matter, and there it rests. In their ambition to rush business they would rather their men would break down than their elevator machinery.

Dr. Rochester, in closing the discussion, said perhaps he did not emphasize as strongly as he might the important effect of other causes besides the dust. The physical strain, long continued, appeared to be an element worthy of consideration. In order that the steam shovelers may not be a moment idle, the men keep at work hour after hour, with hardly a moment's rest, frequently not stopping to eat, but only resting to take a glass of whiskey or a bite of something, and then beginning again. Among the elevators he knew of one, however, where the men were not permitted to work more than twelve hours a day.

Dr. White moved that a committee of five be appointed, of which Dr. Rochester should be chairman, who should take the subject of his paper into consideration, enlist public sympathy in behalf of a reform, and if necessary, strive to secure such legislation as may tend to prolong the lives of elevator employes. Carried.

Dr. Howe subsequently chose Drs. Rochester, White, O'Brien, Davidson and Hauenstein as the gentlemen to constitute the committee.

Under the head of miscellaneous business, a communication was read from J. N. Larned, Superintendent of the Young Men's Association Library, stating that the Library Committee desires to make such purchases of books and periodicals as would be serviceable to medical students and practitioners, the cost of which would not exceed the means placed at their disposal. The opinion of the Buffalo Medical Association was therefore asked, concerning the plan and instructions requested regarding the selection of books.

On motion of Dr. White, the communication was received and the thanks of the Association tendered to the Library Committee, for their generous offer.

Dr. Wyckoff moved that a committee of five be appointed by the President to confer with the Library Committee in the choice of the publications.

Dr. Howe afterwards selected as such committee Drs. Wyckoff, Rochester, Lothrop, Abbott and Bartlett.

In the usual report on prevailing diseases, cases of measles and scarlet fever were mentioned as being particularly frequent, but not of a severe type.

The essayist for the next meeting, on Tuesday, Dec. 2d, was announced by the President as Judge G. W. Clinton, whose subject would be "Malpractice."

On motion, the Association adjourned.

EDITORIAL.

PROFESSIONAL COWARDICE.

IF conscience doth make cowards of us all, surely ignorance has an equal power. Reputation may also be added to this category. If, perchance, by dint of long and earnest effort, a man has secured a high and enviable reputation in his profession, how he nurses it and coddles it! He is as tender of it as if it were a shorn lamb. The scriptural injunction, not to look behind us, is a good one. Rather let us look forward for new and greater successes, not permitting the recollection of past failures, or apprehensions of failure in the future, to diminish our zeal for a noble work, or lessen our usefulness for humanity's sake. No unmanly considerations should interfere with any and every reasonable effort to alleviate human suffering, and to save human life.

Professional life is a constant combat. In disease we have an enemy to contend against which, too often, baffles the most consummate skill. A certain amount of risk, not only to

life and health, as in treating contagious and infectious diseases, must be incurred, but also to reputation if failure to cure should be the poor reward for self-sacrificing labor and effort. The question may arise, whether we have a right to decline to assume the responsibility of a case, or perform an operation in which life may be imperiled, simply on account of the risk incurred to reputation in case of a fatal issue. For instance, we have observed in cases of membranous and diphtheritic croup, a hesitancy to resort to tracheotomy, even when it became apparent that the patient was hopelessly lost without a resort was made to this surgical procedure; yet the administration of muriate of ammonia and muriated tincture of iron was continued, and the unfortunate patient allowed to slowly choke to death, fearing, in case of failure, that ignorant people might say that the child died because the doctor cut its throat. In such cases it is acknowledged, even if life is not saved, the little sufferer is spared the horrible death from slow strangulation, with all its excruciating agonies. Such conduct deserves no other epithet than cowardice. If incompetent to perform an operation, it is the duty of the medical attendant to decline further responsibility, provided the case is at the same time relinquished. But if possessed of the requisite skill we have no right to decline, on account of the risk to reputation, to afford the patient the benefit of this dernier resort.

Not a score of years ago, the same position was taken by the profession in regard to the use of the forceps in difficult and lingering labors. Many entertained a great respect for this useful instrument at that period, yet failed to have the moral courage to use it on account of the risk to reputation, rather than the damage to human life from its application. To-day, the accoucheur who would incur the risk of fistula and inflammation, and the extreme exhaustion from lingering labors, rather than resort to the forceps, would be justly regarded as wanting in those elements of professional strength which should divest him of his diploma.

Virtue, not unlike manly courage, is often its own and only reward, and the effort required to bravely meet the difficulties so often encountered in the daily demands of professional life is an unerring test of fitness for its responsible duties. Medical men cannot escape the responsibilities peculiar to their noble calling even if they would. The profession holds them to the strict line of duty, and the public gives a critical judgment on the moral strength or the niggardly cowardice which, in the one case, makes them perform heroic services in behalf of suffering humanity, or, in the other case, causes them to skulk behind the phantom of reputation.

MORTALITY TABLE.

CONDENSED from National Board of Health Bulletin for the four weeks ending Nov. 1st, 1879.

CITIES.	Estimated Population.	Deaths.	Death rate per 1000.
BALTIMORE, - - - - -	400,000	517	16.80
BOSTON, - - - - -	365,000	525	18.42
BUFFALO, - - - - -	170,000	160	11.79
CHICAGO, - - - - -	460,000	661	18.68
CLEVELAND, - - - - -	160,000	206	16.70
LOUISVILLE, - - - - -	175,000	†80	11.32
NEW YORK, - - - - -	1,097,000	1911	22.64
PHILADELPHIA, - - - - -	901,000	927	13.37
ROCHESTER, - - - - -	90,000	*81	15.57
ST. LOUIS, - - - - -	500,000	380	9.88

† Only two weeks reported. * Only three weeks reported to National Board of Health.

MALTINE.

SOME months ago we received a liberal supply of samples of Maltine and its various compounds. We have not only used them in our own practice, but have given them to other physi-

cians, with the request to report to us as to their experience with it. All of them have expressed a favorable opinion of the preparations, and now commonly prescribe them. Maltine itself is palatable, and we have found it an admirable remedy in affections of the lungs and throat.

It possesses the power of producing a perfect and permanent emulsion with cod liver oil, owing to the action of the diastase present in it. With a few drops of *ol. amygdal. am.* added, an emulsion may be prepared, containing fifty per cent. of oil, which is pleasant to the taste, free from smell of the oil, and much more readily digested than the oil alone.

We look upon Maltine as one of the best of the preparations of malt, and the reputation of Messrs. Reed & Carnrick, as manufacturing pharmacists, is such that we have entire confidence that its present high standard of excellence will be fully maintained.

REVIEWS.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M. D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, &c. Philadelphia: J. B. Lippincott & Co 1879. Part vi.

This number contains three elegant chromo-lithographic plates, illustrating with great accuracy typical cases of syphiloderma (*pustulosa*), erythema nodosum and seborrhœa. The author, taking each case as a text, gives a very clear description of the disease, its pathology, diagnosis and treatment. He then presents almost a clinical lecture upon each disease, the plate serving in place of the patient. We regard this method of treating this otherwise difficult class of diseases as meeting, more completely than any other with which we are familiar, the wants of the profession. We commend the work, and earnestly hope it will meet with the favor it justly merits.

L.

Lecture Notes on Physiology and Pathology. By VICTOR C. VAUGHAN, M. D., Ph. D., Lecturer on Medical Chemistry in the University of Michigan. Second Edition, Revised and Enlarged. Ann Arbor Printing and Publishing Co., Ann Arbor, Michigan.

We are much pleased with this enlarged edition of Dr. Vaughan's "Lecture Notes." The book is an excellent one: clear, concise, convenient and practical. It gives the latest accepted facts of physiological science, as far as they relate to the subject in hand, without entering into the conflicting theories and statements which have been held concerning the phenomena exhibited by animal bodies. A large part of it is devoted to the study of the urine in health and disease. The value of this part of the work will be greatly enhanced by a book of plates, now in press, representing the crystals of the most important of the substances here studied. When these charts appear we will again call the attention of our readers to this excellent work.

D.

Physiology and Histology of the Cerebral Convolutions; also, Poison of the Intellect. By CHAS. RICHTER, M. A., M. D. Translated by EDWARD P. FOWLER, M. D. New York: Wm. Wood & Co.

The tendency of recent investigation is to show that mental phenomena are the result of physical conditions. The author of this monograph follows out the same line of study, to determine, if possible, the function of the gray matter in the convolutions as affecting sensation and motion. After describing the anatomy of this part of the brain, the results of vivisection are narrated at length, and compared with those obtained by other experimenters. The writer is careful not to state any conclusions in a dogmatic manner, but the data are fairly presented to the reader, and he is left, to a great extent, to draw his own inferences. It is evident that much remains to be learned concerning every branch of mental physiology, but the facts we find recorded here, and in fact, whatever positive knowledge we have on the subject, must lead us to consider thought simply as "the physiological function of the brain."

H.

Obstetrical Operations. By ROBERT BARNES, M. D., F R. C. P. New York : D. Appleton & Co.

This work of about 600 pages octavo, with over one hundred illustrative engravings, is one of rare value. We have read it with care, and in so doing made numerous notes with a view to a more or less critical review. The notes are, however, so numerous and the points of interest so abundant that we can only advise our readers, who have not already read it, to immediately obtain the work. The articles are original and practical, and the illustrations, the author tells us, were in many instances drawn at the bedside. We agree with Pagot, when in his preface to the French edition, he says, "I am happy to be able to bear witness to the numerous clinical truths sown over every page of this book. . . The description of the instruments, the application of the forceps, cephalotripsy, embryotomy, cæsarian section, the practical reflections on narrowing and malformation of the pelvis, ruptures of the uterus, placenta prævia, hemorrhage, and in fact, all the great questions in obstetrics, are treated with accuracy and good sense. At each instant, by some remark or other, is revealed a superior mind, ripened by having seen much and meditated much."

The suggestions and instructions in many instances deviate from the accustomed path, but we have failed to find any which, upon reflection, did not present themselves as worthy of acceptance. Once more we say get the book, and read and study it for yourselves.

V. P.

Diseases of the Throat and Nasal Passages. A Guide to the Diagnosis and Treatment of Affections of the Pharynx, Oesophagus, Trachea, Larynx, and Nares. By J. SOLIS COHEN, M. D., Lecturer on Laryngoscopy, in Jefferson Medical College, etc., etc. New York : William Wood & Co.

This is the second edition of the author's well-known work, and the anticipations with which the profession have looked forward to its appearance have been more than fully realized. We consider it an honor for American medical literature to

possess a work like this, by all means the largest, most perfect and most complete handbook on diseases of the upper air-passages yet published. The second edition is so much enlarged and amended that it may be considered a new work. Among other things, the author's valuable lectures on the Surgery of the Larynx, Nares and Trachea, on Fetid Coryza, Sore Throat and Diphtheria are included in this edition. The fifth chapter, on Diphtheria, is especially interesting. The author is an ardent advocate of tracheotomy, "if there be such evidence of false membranes in the larynx and trachea as to threaten suffocation. There is no insuperable contraindication, unless it be the evidence of the deposit of fibrine in the cavities of the heart. It is a chance for life which should not be denied the patient—and the sooner the operation is performed after it is indicated, the better the hope of success." It is the same opinion advocated by the great European surgeons, led by Trousseau.

The illustrations are numerous and excellent, and the book as a whole is a work which no physician, who has any desire to follow the progress of medical science, can afford to be without.

M.

Students' Pocket Medical Lexicon: Giving the Correct Pronunciation and Definition of all Words and Terms in general use in Medicine and the Collateral Sciences, etc., etc. By ELIAS LONGLEY. Philadelphia: Lindsay & Blakiston. 1879. 303 pp.

The author's preface to this little work takes up four closely printed pages, in which he aims to establish the need of a new lexicon "to enable students, and even old practitioners, to understand all they hear and read on professional subjects." The English mode of pronunciation is adopted in preference to the Continental, to which also is added the phonetic orthography of each word. Inasmuch as many students have not been favored with a liberal education, the system, which this work adopts, has many advantages deserving of special commendation. We regard this lexicon a valuable aid to the student for whom it is designed.

L.

First Step in Chemical Principles. An Introduction to Modern Chemistry, intended especially for Beginners. By HENRY LEFFMANN, M. D., Lecturer on Toxicology in the Summer school of Jefferson Med. College. Philadelphia: Edward Stevens & Co. 1879. 50c.

To those commencing the study of chemistry and to medical students, we would particularly recommend this little book. The mysteries of equivalents, atomicities and chemical notation, which beginners find it so hard to understand, are here plainly and simply explained, as only one familiar with the difficulties which the students encounter could do it. This little book should be in the hands of every medical student. D.

Winter and its Dangers. By HAMILTON OSGOOD, M. D. Philadelphia: Lindsay & Blakiston. 1879.

This is number six of the American Health Primer Series, and is devoted to the consideration of dangers arising from errors in dress; carelessness and ignorance in bathing; inattention to pulmonary food; dangers from overheated air; indifference to sunshine; sedentary life and neglect of exercise; dangers of school-life in winter; winter amusements, etc., etc.

These subjects are treated in a plain and practical manner, suited to the non-professional reader. The work is an exceedingly useful one, and contains information in a condensed and convenient form, suited for general distribution. L.

The Multum in Parvo Reference and Dose Book. By C. HENRI LEONARD, M. A., M. D. 3d Edition, revised and enlarged. Detroit.

This new edition of Leonard's Dose Book contains the doses of over 2500 preparations. We find in it many of the "out of the way" remedies, of which as being little used, the practitioner is very apt to need a reminder as to dose, etc. Some 225 *new* preparations have also been added to the list, and also tables giving the relation of metric weights, etc; a list of incompatible and other information, which makes the little book indeed a "multum in parvo." D.

Photographic Illustrations of Skin Diseases. By GEORGE HENRY FOX, M. D., Professor of Dermatology in Starling Medical College. New York: E. B. Treat, 805 Broadway.

We have received the first part of this elegant work, which will be completed in twelve parts, containing in all forty-eight colored photographs taken from life. The first part contains four plates, Comedo, Acne Vulgaris, Lepra Tuberosa, Elephantiasis, each accompanied with a short but distinct and clearly-written text, in which the rules for treatment are laid down. The plates are a marvel of successful representation of skin diseases, and could scarcely be surpassed. Any physician will learn more about the diagnosis of these diseases by the aid of this work, in an hour, than by reading a large book; they are indispensable for the teacher and the student, as much as for the practicing physician. They are recommended highly by the leading dermatologists of this country. We predict a great success for the work. Considering the excellence of the plates, the price, \$2 for each part, is moderate. M.

Posological Tables; including all the Official and the Most Frequently Employed Unofficial Preparations. By CHARLES RICE, Chemist, Department of Public Charities and Correction, &c. Revised and Approved by Members of the Medical Boards of Bellevue and Charity Hospitals. New York: William Wood & Co.

This is a very well-arranged and complete dose list, and will be found very convenient to the physician as a book for ready reference. A table of equivalents of weights and measures of the decimal and common system is appended, also rules for their ready conversion. D.

BOOKS AND PAMPHLETS RECEIVED.

Physician's Visiting List for 1880. Lindsay & Blakiston.

Walsh's Physician's Combined Call-Book and Tablet. Published by RALPH WALSH, M. D., 326 C. Street, Washington, D. C.

Walsh's Physician's Handy Ledger, a companion to Walsh's Physician's Combined Call-Book and Tablet. Published by the same. Price \$3.00.

Transactions of the Medical Society of the State of New York.

American Cyclopedia of Domestic Medicine and Household Surgery. By SAMUEL PAYNE FORD, M. D. E. P. Kingsley & Co., Chicago. 1879.

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ORIGINAL COMMUNICATIONS.

MALPRACTICE.*

BY GEORGE W. CLINTON, LL. D.,

Late Chief Justice of the Superior Court of the City of Buffalo.

Gentlemen :—Respect and esteem for my many friends in the Buffalo Medical Association led me to accept your cordial invitation to prepare for you a paper on medical malpractice. It will, I know, be an offering but ill-proportioned to my veneration for your profession and my desire to be of service to its practitioners in our city. To treat this great topic ably, one should be a sound lawyer, and a thoroughly educated physician and surgeon. Whatever I may be as a lawyer, my knowledge of your profession is naught. True it is that, a little more than half a century ago, I devoted two years of my life to the study of medicine and its auxiliary sciences, with reasonable facilities and under able teachers, and I hope that I will not be deemed immodest in declaring my belief that, if I had continued my studies another year, I should have graduated with honor. But, thank heaven, science and art are not and never have been stationary. The

* Read before the Buffalo Medical Association, Dec. 2d, 1879.

mind is never satisfied with its possessions, and the triumphs of art and acquisitions of knowledge, precious as they are in their fruition, are the strongest incentives to continued research and new effort. Hippocrates, like Æsculapius, is a famous but unfruitful name. The Hippocratic collection seems of interest only as material for the history of the art. The name of Galen is justly honored, but I apprehend that the utter destruction of all his writings would not deprive modern practitioners of a necessary or useful guide in any matter of sound practice, or blot out a now accepted theory. Probably neither of the three, were they now resuscitated and forbidden to add to their professional learning and implements, would be found fit for a place in this honorable body.

What another half century may do for the elevation of the profession, is a mere matter of conjecture ; but, judging from the past, I augur great things for it. And here allow me to suggest, in passing, the possibility that, in therapeutics, the weight of the air and its hygrometric and electrical conditions may become, in many cases, matters to be taken into account. Certainly the past half century has been very fruitful of improvement. Sure am I that were I possessed of all the knowledge and all the skill I could have won in the two years I have alluded to and a third one added, and nothing more, I would not dare to present myself as a candidate for the degree of Doctor of Medicine. If I did, I am sure I would be kindly but peremptorily rejected. And so I know that I am not able to do full justice to the subject you have assigned me, and must again crave your kind indulgence.

In its most general sense, malpractice is illegal or immoral conduct. Webster also defines it as "practice contrary to established rules ; especially professional misconduct of a physician." I am not satisfied with this definition. Professional misconduct of a physician is not always malpractice, although, if knowingly committed, it is ill-doing. The misconduct may be the fruit of innocent error. To be malpractice, in the technical sense, it

must be the fruit of a want of due degree of skill and care, and subject the patient to appreciable and unnecessary injury. The lawyer, in relation to his client, occupies precisely the same relation that the physician or surgeon occupies in relation to his patient, and the duties and liabilities of the two are identical in definition and in measure. It is only, however, of medical malpractice that I shall speak. That, in my opinion, is such professional mistreatment of his patient as injures the patient and subjects the practitioner to a civil action for damages. This seems, at any rate, to be the ordinary understanding of the word. But, for the purposes of this paper, I will broaden the definition, so as to include instances of professional maltreatment and misconduct, which the law expressly denounces and punishes as crimes.

We might perhaps truly say that malpractice is the opposite of good practice; but this aids us no more than if we were to declare that good practice is the opposite of bad practice. So the definition I have given is simply a broad generalization, intended, like a great net drawn around a shoal of fish, to include them all. We may be sure that "all is fish that comes to our net!" but may still be ignorant of the essential structure and organization which constitute a fish and distinguish and separate it from all other animated orders. If we are not informed of these essentials, we may possibly call an eel a snake, and deem the whale a fish. What, then, are the essential qualities of malpractice? The general answer is, in every imaginable case of malpractice, that the practitioner has been guilty of a breach of duty to his patient. By assuming the case professionally, he, in the law, impliedly contracted to judge and treat it with a degree of professional care and skill, and has failed in doing so, to the injury of his patient. Men in every occupation vary in carefulness, in knowledge of and in ability in the occupation. As to care, which includes watchfulness, diligence, attendance and precautionary inquiry and examination when needed, it is generally regarded by lawyers as existing in three degrees, as is negligence its opposite. These degrees are thus distinguished in the

books: ordinary care is that diligence which the generality of mankind use in their own affairs, and the want of it is ordinary negligence. That care which very inattentive and thoughtless persons never fail to take of their own affairs may be called slight care, and the want of it is gross neglect. The omission of that care which very attentive and vigilant persons take of their own affairs is slight neglect. Skill would seem to be regarded by the law as divisible into like degrees. It is possible that the law may recognize slight skill and gross unskillfulness, and great skill and slight unskillfulness, and the books and decisions do use, in reference to medical practice, the term ordinary skill; and they expressly declare that the surgeon and physician contract only for the exercise of ordinary care and skill, and are responsible only for the want of ordinary care and skill. *Omnia definitio in lege periculosa est.* These attempts at definition are not wholly satisfactory. They are indefinite and lack precision. Between slight and ordinary negligence on the one hand, and ordinary and gross negligence on the other, the boundaries are uncertain. Slight negligence and gross negligence, when presented before us, are recognized at once, but a case of ordinary negligence may seem slight to some, and gross to others. Occasionally a court has, apparently, attempted to define more specifically the meaning of ordinary care and skill, and used language liable to be so construed as to demand of the practitioners, in extraordinary cases, an extraordinary degree of, if not the highest, skill.

In *Landon vs. Humphrey*, 9 Conn. 242, a case of malpractice, the court said: "If there was either carelessness, or a want of ordinary diligence, care and skill," the plaintiff was entitled to recover the damages consequent therefrom. The words "either careless or" are either repugnant to "a want of ordinary diligence" and "care," or merely redundant, and should be stricken out. They would seem to imply that slight want of care was sufficient to make the practitioner liable for the consequent damages—a proposition utterly opposed to the whole current of authority.

In *Braunberger vs. Cleis*, decided in a District Court of Pennsylvania (13 Am. L. Journal, 587), the learned judge says: "The more difficult the duty or operation, the greater is the degree of care and skill requisite for its successful accomplishment; and in the performance of very difficult and dangerous operations in surgery, the surgical practitioner is required to possess and employ a higher degree of care and skill than would be necessary for the performance of operations less difficult and dangerous. But he is only required to employ a reasonable degree of care and skill in the operation, and in the previous and subsequent treatment of the case—that is to say, such a degree of care and skill as men of ordinary prudence, learning and skill in this department or profession"—(surgery, I suppose) "usually possess and employ, and if he does not, he is responsible for the injury occasioned by negligence or unskillfulness in this respect."

In *Long vs. Morrison*, 14 Indiana R. 505, this language is used: "A physician is liable for damages arising as well from the want, as from the want of application, of skill. It is his own fault if he undertakes without having sufficient skill, or if he applies less than the occasion requires." These propositions are, probably (I have not the reported case before me), qualified by the context. They would seem to lead to conclusions not sanctioned by the law.

In *Iowa (Smothers vs. Hawks*, 34 Iowa 86, and *Almond vs. Ungent*, 34 Iowa 300), ordinary medical skill and diligence is declared to be "the average of that possessed by the profession as a body, and not of the thoroughly educated only, having special regard to the improvement and advanced state of the profession at the time of the treatment."

In *Patten vs. Wiggin* (51 Maine 594), the court says of medical practitioners: "They are bound to use their best skill and judgment in determining the nature of the malady, the best mode of treatment, and in all respects to do their best to secure a perfect restoration."

In reference to the foregoing extracts from decisions, it is necessary to bear in mind that the opinion of the Court is to be

read and construed in connection with the facts of the case decided. When we faithfully do this, we often find that a different and consistent interpretation plainly flows from language which we otherwise might have regarded as incongruous and unreasonable. So construed, I have found no reported case in which the doctrine is asserted or acted upon, that the medical and surgical practitioner is bound to the possession and exercise of a higher degree of care and skill than that which the law calls ordinary. I hardly know how to define that degree. It can hardly be the average of the care and skill of the profession. It is impossible to ascertain that average, and, if ascertained, it would be impossible to express it and mold it into a rule or standard. I should say that the degree of care and skill required by the law of the physician and surgeon, whether we call it ordinary or not, is that degree the exercise of which generally satisfies the consciences of physicians in good standing. Whether it has been exercised or not cannot be determined, in the absence of gross negligence or plain mispractice, without a dispassionate consideration of the whole case. A mistake in the diagnosis may lead to a wrong treatment, and result disastrously. But it by no means follows that the physician was professionally ignorant, or incautious in his conclusions as to the disease, or in the treatment consequent upon his conclusions.

In an action for malpractice, the defendant who, being well educated in the profession, in his treatment of the plaintiff, acted in accordance with his conscientious convictions of duty, may almost certainly rely upon acquittal. The failure to cure establishes no default on his part. Physicians of ordinary skill are far from adopting in similar cases the same medicines, appliances, and means of cure. There is room here for a wide diversity of practice. If he has not and cannot timeously procure the most approved medicaments, and the most perfect surgical instruments and implements, it argues neither carelessness nor a want of ordinary skill to use what, in his judgment, are the best substitutes he has at hand. In the excusable absence of quinine he

may use Fowler's solution. If there be no tourniquet at hand, he will have recourse to the compress and the handkerchief to close a cut artery. I am not prepared to say that under imaginable circumstances he would not be justifiable in cutting off a broken and mangled limb with a jack-knife, and thrusting the stump into melted pitch.

Whether it be prudent or imprudent in a young surgeon who has had but little practice in his profession, and few or no opportunities to witness difficult operations, to undertake a difficult and precarious one, is altogether dependent upon circumstances. They may imperatively command him to attempt it. Life, or consequences as deplorable as death, may depend upon his decision to proceed at once. In such a case his conscience is clear, and there can be no legal liability for the result. If, however, there be time to call in an experienced surgeon, and he rashly takes sole charge of the case, and performs the operations carelessly and unskillfully, he must abide the condemnation of the law. A physician or surgeon is not absolutely bound by the diagnosis of others superior to him in reputation, but may act in accordance with his own. I read in a newspaper, many years ago, a statement of which this is a summary. Eminent surgeons examined a patient, and determined that he was suffering from a deep-seated aneurism. A young surgeon (a name was given) concluded that it was an abscess, took charge of the case and used the bistoury; pus followed, and the patient was restored to health. A subsequent similar case occurred, and his diagnosis was the same, but he was mistaken, and the bistoury caused immediate death, whereupon he went home and committed suicide. This dreadful result proves nothing. A properly careful diagnosis, though mistaken, justified the treatment.

With the death of the surgeon or physician a right of action against him for malpractice absolutely abates; and the action in like manner abates upon the death of the wronged patient. One who is injured by the wrongful violence or negligence of another has an action for the damages sustained by him, but, if his death be caused by the violence or negligence, his right of action abates,

and the common law gives no remedy to his personal representatives, or widow, or next of kin. In 1847, a law was enacted by our Legislature, giving an action to the personal representatives of any person whose death should be caused by the wrongful act, neglect, or default of another, in case such person, if he had survived, would have had an action for his damages against the wrong-doer. In this action the jury may give such damages (not exceeding \$5000) as they shall deem a fair and just compensation with reference to the pecuniary loss resulting from the death to the widow and next of kin, among whom the recovery is to be distributed as in cases of intestacy. It is to be observed that the statute expressly provides that the wrong-doer shall be liable to this action, "notwithstanding the death shall have been caused under such circumstances as amount in the law to felony"—that is to say, to a crime punishable by imprisonment in a State Prison or by death. This provision abrogates the common law doctrine that in felony injurious to a private person, the private injury is merged in the crime so that, at law, the personal injury is irremediable.

That where malpractice causes death, the surgeon or physician is liable to this statutory action, there can be no reasonable doubt. In *Braunberger vs. Cleis*, before cited, the practitioner was held to be liable, under a similar statute, giving an action for every death caused by illegal violence or negligence. It is very clear that a death caused by malpractice is caused "by a wrongful act, neglect or default," within the meaning of our statute. Indeed the case of *Quin vs. Moore*, which originated in our city, and is, I presume, fresh in the memory of some of you, is decisive of the question. An apothecary's clerk sold a boy's mother morphine for quinine. It was duly administered to the boy as quinine, and caused his death, and the Court of Appeals, our highest court, held that the apothecary was liable to damages for the death under the statute.

The physician must be a hero. He must expose himself to dangers more imminent than those of battle. He must accept

cases of infectious and malignant disease. But he is bound in conscience and by law to use every reasonable precaution against his conveying it to others. In Kentucky (12 B. Mon. 467) a physician who, while attending a person laboring under such a disease, neglected to take the usual precautionary measures to purify himself, and consequently communicated it to another patient, was held subject to the latter's action for damages.

A physician or surgeon may, of course, at the instigation of the devil, intentionally kill his patient by poison or other maltreatment. In such case he is, of course, guilty of murder, and would be liable to an action under the statute I have referred to.

So, under the like influence, he may prescribe medicine for a pregnant woman, or use, or advise her to use, mechanical or other means of procuring abortion, with intent to produce a miscarriage, where such miscarriage is not necessary to preserve the life of the woman. In such a case, if a miscarriage does not take place, or does occur and is not fatal, either to the mother or the child, the physician (or other person) is guilty of a felony, punishable by imprisonment in a State Prison for not less than one, nor more than three years. In this case, you will observe that the mere prescription or advice with the intent to produce a miscarriage, constitutes the crime. But if the prescription, or use of the medicine, or the use of the mechanical means, with the intent to produce a miscarriage, result in the death of the mother or the child, then the physician (or the person) is guilty of a felony punishable by an imprisonment of not less than four nor more than twenty years.

Our law recognizes the duty of the physician to keep, as far as possible, his mind clear and strong, and his powers of observation unimpaired, when dealing with his patients. This is manifest in this statutory provision: "If any physician, while in a state of intoxication, shall, without a design to effect death, administer any poison, drug or medicine, or do any other act to another person" (patient) "which shall produce the death of such other, he shall be deemed guilty of manslaughter in the

third degree." That crime is punishable by imprisonment in the State Prison for not less than two, nor more than four years.

Our Revised Statutes, after defining murder, justifiable homicide, and three degrees of manslaughter, add the following enactment: "Any other killing of a human being by the act, procurement, or *culpable negligence* of another, when such killing is not justifiable or excusable, or is not declared in this chapter murder, or in this title manslaughter, of some other degree, shall be deemed manslaughter in the fourth degree." It seems to me that if the death of a patient be produced, proximately, by the neglect of the physician, so as to render the physician liable for damages to the widow and next of kin, under the act of 1847 above referred to, he is also guilty of this crime.

I might properly—perhaps it would be better to—end this paper here. But, my friends, my regard for you impels me to remark upon another theme which is alien to the topic you assigned to me. I refer to your duty and deportment as witnesses in courts of law. You are liable to be called upon, and are frequently called upon, to testify, as experts or otherwise, and it seems to me, I am free to say, unjust that, in the matter of compensation, you should not be distinguished from ordinary witnesses. As witnesses, you are compelled to submit to pecuniary loss, and too often to put the health and safety of your patients in hazard. The testimony of physicians, surgeons and chemists, as experts, are often indispensable to the administration of justice. When true and properly delivered, it is a sure shield of innocence and detection of guilt.

At common law, the disclosures of the patient to his physician are not sacred; and the physician, as a witness, is compelled to testify as to the communications of the patient, however necessary, to enable him to judge and prescribe. The Revised Statutes contain an enactment, which, as re-enacted by the code with some change of phraseology, reads thus: "A person duly authorized to practice physic or surgery shall not be allowed to disclose any information which he has acquired in attending a

patient, in a professional capacity, and which was necessary to enable him to act in that capacity" (Code, § 832). This language is extremely broad and comprehensive. My belief is that the courts will construe it as applying only to information derived from the patient, and apply it only to actions and indictments in which he is directly interested. Surely, if a man be injured by another, the physician who attended him must be admitted, on the trial of the injurer, to prove all of the injured man's disclosures, and his bodily condition and symptoms. In *Johnson vs. Johnson* (4 Paige, 460), Chancellor Walworth held that the testimony of the physician was admissible, he only objecting. But, upon the reversal of that case in the Court for the Correction of Errors, Chief Justice Savage maintained, what is apparently the true doctrine, that the secrecy of the physician is solely the patient's privilege, and that the physician cannot testify as to the facts within the Statute prohibition unless the patient grants permission. A violation of the prohibition of this Statute is a misdemeanor (2 R. S., 696, § 39), and is punishable by imprisonment in jail, not exceeding one year, and by a fine not exceeding two hundred and fifty dollars, or by both such imprisonment and fine.

As to the delivery of testimony by you as experts, I have very little to say that might not just as properly be said to a witness who is called to testify only as to the facts of the case. The difference rests in this: The expert as such is asked only for his opinion upon the facts. He may be asked his opinion upon a hypothetical state of facts, and required to give reasons for the opinion he expresses. The cross-examiner is allowed great latitude, and, I am sorry to say, not infrequently abuses it. But if the witness will only remember the worth and dignity of his profession, and that he is there simply to speak truth, as a servitor of justice, no arts or sneers of counsel can disturb him. Calm and self-possessed, he will answer every question, direct or cross, fully, and in the plainest and most lucid language in which the meaning of the answer can be conveyed to the jury. To

such an answer he will add nothing, unless it be a necessary explanation. He will not air his learning before the court, nor have any the least contention with counsel. The court will, if need be, protect him from the abuse of lawyers. Such a witness will retire from the stand as calmly as he went upon it, approved by his own conscience, and respected by the court, the jury and the bar.

HEMORRHAGES FROM THE LUNGS.*

BY WILLIS E. FORD, UTICA, N. Y.

MEDICAL MEN have always differed widely in their opinions as to the significance of hemorrhage from the lungs. Sylvius, Sydenham, Boerhaave and Andral held the doctrine that hemorrhage caused the diseases of lungs which were observed to follow in so many instances. Laennec taught that hemorrhage was only one of the symptoms of already existing disease of the lungs. It is interesting to note that many careful observers of disease have now come back to something akin to the old views of pulmonary hemorrhage and regard it as not always the result of phthisis but as an accident which in certain cases may be harmless, while in other cases it may bring about destructive disease of the lungs. Niemeyer and his followers are foremost in advocating this theory, and of course this must be the tendency of all those who believe in the doctrine of the local origin of phthisis. In judging of medical facts, it is sometimes unfortunate to have a theory too vividly in mind, for the judgment may be obscured regarding the individual case, and I believe this has been true regarding pulmonary hemorrhages. If, on the one hand, they are looked upon as harmless, or even beneficial in relieving a congested lung, then nothing is done and the patient may drift rapidly into hopeless disease. On the other hand, if the hemorrhages are looked upon as the simple announcements of existing consumption, then the case is thought to be hopeless and a routine treatment is applied.

*A paper read before the Oneida County Medical Society, October 14, 1879.

I believe that pulmonary hemorrhages have such a variety of causes, and the ultimate results of such hemorrhages are so widely different, that each case requires the most careful examination and study, and that there can be no routine treatment.

Hemorrhages, occurring during the progress of an ordinary course of phthisis, are due to the giving way of the coats of some blood-vessel at the site of the trouble. They are usually seen early in the formation of an abscess, and their situation can be easily made out. This form of hemorrhage need not be dwelt upon here, neither the hemorrhages caused by traumatism.

The most important class of cases, and that to which I wish especially to call attention in this paper, comprises those who have a hemorrhage from the lungs, without knowing that they have had any special trouble there before. Now, to assume that all such persons, even though they may have a family history which predisposes them to consumption, have already a tubercular deposit in the lungs and are therefore doomed—is, I believe, unfair, and is apt to cut such patients off from appropriate treatment. Following out the history of these persons, we find many do recover fully, and that without any special treatment, though many others gradually sink into fatal disease of the lungs. A careful examination of the facts after such a hemorrhage will in most instances show that there has been a gradual decline in general health for some time, usually for several months. There has been a loss of flesh and strength, a falling off of the appetite, and an inability to do easily the customary work. These symptoms may pass unnoticed, and even if pain occurred, it would not be heeded by many persons, or remembered till after the hemorrhage. Of course, immediately after this, there is great pallor and weakness, due partly to the shock and the apprehension, and partly to actual loss of blood. If an examination of the lung be made now, in a large number of cases no consolidation will be found, and the air will enter fully all parts of the lung, and, if the hemorrhage has been stopped for some

hours, it will be difficult to detect the spot from which the blood came. Upon listening to the breathing, however, there will be a harshness of respiration over certain portions of the lung, and the attentive and practiced ear will discover that this harshness is made up of innumerable little rales that are soft and moist. These crepitant and sub-crepitant rales are heard from day to day in the same place, and are not removed by coughing. At the same time the air will be heard freely entering the lung beneath them.

A case illustrating this condition, and which I observed carefully during its entire progress, was a man aged thirty-three years, who, from close confinement and hard work, ran down in health for a month or two. He lost flesh and strength, but was not aware of any lung trouble, until in getting up one morning he began to spit blood. The hemorrhage was not a copious one, but when I saw him a few hours later, he was much prostrated, his temperature was raised a degree, and his pulse was a hundred and ten. There was evidence of plastic exudation over a small part of the left lung. He got about again in a few days, but he had pleuritic adhesions where the original trouble began; these adhesions became organized; an appreciable consolidation of lung took place at this point, and for six months or more he had cough, profuse expectoration, and at times night sweats. He was a judicious man, however, followed carefully his treatment, and resolution slowly took place. He has remained well for two or three years. Another case parallel in its early stage was seen last year in a young woman about twenty-one years of age, unmarried, and a teacher by occupation. During a term of school when her work was hard her mother died. The grief and anxiety regarding her family, and her hard work, reduced her in strength, and after a few weeks she had a profuse hemorrhage from the lungs. I saw her a year later, and during this interval she had experienced pain in the side, had persistent cough and profuse expectoration. At the apex of the left lung there was found an extensive pleuritic adhesion

with some consolidation beneath it, though air could be heard to enter the lung freely underneath. She was then subject to frequent hemorrhages, and night sweats, loss of appetite and hectic. She steadily failed, and recently died. Another case: a man for whom I prescribed once or twice during the summer for want of strength to pursue his ordinary vocations, and loss of appetite; he had no symptoms of lung disease, but was simply depressed by overwork and anxiety; a few weeks ago while away from home and very busy, he suddenly began to spit blood; it was bright red blood, came without any effort of coughing, and was quite profuse; this continued for two or three days, and was accompanied by pain in the left side. His physician found plastic exudation of the pleura, covering the lower lobe of the left lung; and speedily he had pneumonia of this lobe which ran through the ordinary stages. When he was supposed to be convalescing, he was one morning attacked by pain in the opposite side, and very soon began to spit blood as freely as before. An examination showed pleuritic exudation over the middle and lower lobes of the right side, and this was soon followed by consolidation of the lung underneath, and the usual course of pneumonia followed, excepting these two notable features. His respirations were never over eighteen per minute, and he continued to spit bright arterial blood until resolution was nearly completed.

Such cases as these, of which many more typical examples might be given, seem to point to the pleura as the original cause of the trouble. As we should naturally suppose, inter-pleural plastic exudation, together with swelling of the membrane, must exercise more or less pressure upon the lung beneath, and especially so after adhesions have formed, and have begun to contract, according to the law which governs all new formations of this kind. The air cells are compressed, and the circulation of the capillaries of the lung interfered with. The obstruction to the circulation of the blood from the pulmonary artery is not attended with any serious result, but to obstruct or to retard the

flow of blood through the nutrient arteries, is simply to dam up the blood in the bronchial arteries whence they are derived. These nutrient arteries differ from all other arteries in the body, in that they have no *venae comites*. The blood which they carry to the tissues of the true respiratory system for their nutrition, is oxygenated as it passes along towards the pulmonary vein, never becoming venous in character. This back pressure explains the tendency to bronchorrhagia and bronchorrhœa in many cases, and we should endeavor in treatment to remove the obstruction which causes the oozing of blood or serum through the bronchial membranes. The treatment of the mucous membranes themselves, which are not at fault, is very naturally attended with no very flattering results. Any one, at all familiar with autopsies, will have been struck by the frequency of the occurrence of the evidences of inter-pleural fibrination even where no disease of the lung had been known to exist during life. Any prolonged depression of the vital powers is sufficient to produce it, such as over-work, venereal or alcoholic excesses, et cetera.

When these adhesions, of which I have spoken, are thoroughly organized, and their strength and number are increased by a continuation of the pleuritic trouble, then the contraction is sufficient to impede the entrance of air into a considerable portion of lung, and the patient begins to stoop forward to breathe hurriedly, and degeneration of lung, with the ordinary wasting of phthisis, begins. Dr. J. R. Leaming, who has recently made a very valuable contribution to the study of phthisis, asserts that nine-tenths of all the cases of phthisis in this climate begin in the way I have just described. Of course, this assumes that many of the cases of chronic catarrhal-pneumonia are not strictly affections of the bronchial mucous membranes, but that they have their origin in the pleura, and that the profuse expectoration and the hemorrhage are due to obstruction of the nutrient arteries, as I have just described. This is undoubtedly true of many cases, and especially so where early hemorrhages occur,

and no ulcerative process or other local injury can be found to account for it. A careful physical examination will throw much light on this question. The rales that are heard are minute, very fine, and seem to be very close to the surface, while beneath them can be heard the true respiratory murmur, entirely unaccompanied by bronchial sound. Of course all this cannot be determined at the time of the hemorrhage itself, but it is very important that this class of cases should be recognized as early as possible, for many prove amenable to treatment.

Hemorrhages occurring as a result of strain or of excessive muscular exercise are quite common, and though not immediately dangerous, are apt, I believe, to cause disease of the lungs. If during the hemorrhage, either as a result of coughing or of forced inspiration, any considerable amount of blood be drawn into the air cells, it may act like other foreign bodies in exciting inflammation of the lung tissue. I know that Hertz in Ziemssen's *Cyclopædia* distinctly states that bronchial hemorrhages never cause phthisis. He says the inspired blood could cause superficial irritation in the bronchioles and alveoli which might lead to caseous metamorphosis of their contents, but that this is sure to be absorbed. He quotes Buhl as saying catarrhal pneumonia, as distinguished from desquamative, never causes extensive destruction of lung tissue. This seems a specious argument, one which I would gladly believe if possible, and I have brought up this subject, as to the effects of pulmonary hemorrhage, in this place in order to relate a case of hemorrhage from excessive muscular exertion which seems to bear directly upon this point. An asylum attendant, aged about 23, strong and well, so far as known by himself, his family or the physician who had seen him daily for two years in the discharge of his duties, being very anxious to overtake and return a patient who was escaping, and who had the start of him, ran for an hour or more. He was stimulated to do his utmost by the desire to excel other attendants, and also by the fear that unless he succeeded, some blame might be attached to him. Almost immediately afterward he

began to spit blood. The hemorrhage came from the left lung, upper lobe, and was quite profuse. Of course his respirations at the time were very labored, and he was in the most favorable condition to draw in and retain some of the blood. A dry asthmatic cough followed, and though he was under the most favorable hygienic conditions, a consolidation of the lung took place, and within a year he had begun to develop a cavity, and all the symptoms of a progressive phthisis were present. There was no hereditary taint and all the circumstances seem to point to the hemorrhage as the starting point of his consumption. Another case of hemorrhage which I saw, came from muscular strain in lifting, which did not eventuate in any serious disease of the lungs, probably from the fact that the blood came slowly and but little was retained. A case of purpura also, in which extensive and prolonged hemorrhage from the lungs occurred, was followed by a lobular pneumonic inflammation, and caseous degeneration of the lungs. In this case I had examined the lungs carefully some time before, and with negative results. Only last week I saw a case of consumption in its last stages which had its beginning in hemorrhage of the lungs, less than one year ago. At that time her physician said that the bleeding would do no harm, and that she might go on with her regular work in the factory. I have notes of many cases which, like the preceding ones, go to show that hemorrhages may result in the most fatal consequences, and I think the cases are few in which a person may be told that a hemorrhage will do no harm, and may therefore be allowed to pass without careful watching and treatment.

I have always doubted those cases reported to have been the result of vicarious menstruation, or of an effort of nature to prevent disease, or to restore a lung already affected.

In the treatment of hemoptyses, I believe that too much reliance has heretofore been placed upon the administration of astringents. It is true that many hemorrhages are self-limiting, and cease, whether astringents have been used or not, when the

immediate pressure is removed. Where there is great relaxation of the walls of the blood-vessels, however, with continuous oozing of blood, the so-called hemastatics do but little good. Dry cups to the chest are of immense service. Five or ten may be applied at once, and repeated once or twice, if necessary. Next in importance is opium, given in such doses as to contract the pupils, to allay pain and nervousness, and to reduce the respirations to from fourteen to seventeen per minute, and this should be continued for several hours after all hemorrhage has ceased. Ergot is useful in connection with opium, for it undoubtedly assists in stimulating the vaso-motor nerves to give contractility to the arteries. Absolute rest must be enjoined in every case. Where there is any ulcerative process going on within the lung, and it is reasonable to suppose that the walls of a blood-vessel have given way, then ice to the chest, together with ergot and opium, will do best.

In all cases of profuse hemorrhage the patient should lie upon the sound side, pretty well over upon the face, and should avoid, as much as possible, the act of coughing, so that blood will neither settle backward into the air cells, nor be drawn in by forced inspiration.

Of course the after treatment in those cases in which the pleura is involved is of vastly more importance than the immediate relief of symptoms; rest to the lung, so far as possible, should be secured. Counter-irritation by means of iodine or dry cups should be applied every other day, together with the administration of tonics, and in some cases stimulants. Where there is much cough or expectoration I have found the cold infusion of wild-cherry bark, with chloride of ammonia, as recommended by Dr. Leaming, very useful, more useful indeed than in any other kind of cough. In every instance of hemoptysis from any cause, where there remains in the lung any indication of retained blood, the utmost caution should be used. Absolute freedom from work, anxiety or annoyance must, if possible, be secured, and the patient must be given the best hygienic sur-

roundings, while counter-irritation is kept up over the affected portion of the lung, and tonics are judiciously administered until there is complete restoration to health. I am convinced that there are no accidents so commonly befalling men in this latitude, deserving skillful investigation into their causation and more patient and persistent care afterward, and in which the welfare of the patient is more dependent upon good management, than in hemorrhage from the lungs.

CLINICAL REPORTS.

A CASE OF PUERPERAL ECLAMPSIA.

REPORTED BY F. W. BARTLETT, M. D.

OCTOBER 18th, 1879, I was summoned hastily to attend Mrs. C., primipara, aged 26 years, for whom I had made an obstetric engagement; unable to leave another patient, I referred the case to Dr. J. W. Keene; upon visiting the patient at midnight, Dr. K. found no evidences of labor; patient had headache, nausea, steady unremitting pain in abdomen, which she thought had been induced by fatigue, having been very busily employed in household duties during the day. Squibb's tinct. opium was ordered in ten-drop doses; after about two hours' delay Dr. K. returned home; at 2:30 A. M. the 19th, half an hour after leaving the patient, he was again called to find her slowly recovering from a convulsion; Dr. A. Dagenais, who had been summoned, was also present. In answer to another summons, being at liberty, I proceeded to the house, entering just as a second convulsion occurred. The violence of the convulsion was subdued by etherization, and we consulted as to the proper course to pursue.

It may be stated here that I had six weeks before tested for albumen with a negative result. Two weeks later, however, it was notably present, and saline cathartics and usual diuretics

were ordered, which failed to lessen the proportion of albumen; the patient was plethoric and œdematous; sixteen ounces of blood were taken from the arm on October 12th, seven days prior to confinement.

After interchange of views, I examined and found the os uteri unchanged; no evidence of dilatation; Dr. Keene administered thirty drops of fluid extract ergot hypodermically, and fifteen minutes later fifteen grains chloral hydrate in same manner. This plan was followed until about six doses of each article had been injected at intervals of fifteen minutes each; meanwhile, I practiced manual dilatation, introducing one, two and ultimately three fingers within the os, until it was dilated to about one and a half inches diameter. I then passed the right blade of Prof. White's forceps, and after a vexatious but necessary delay succeeded in introducing the left, and locked them. The cervical opening did not then exceed two inches in diameter, and the os was still thick and rigid.

Traction was carefully made, and at the expiration of an hour, or about 6:30 A. M., three hours after dilatation was attempted, the delivery was accomplished—child still-born. At 8:30 a strong convulsion; injected fifteen grains of chloral; chloroform by inhalation; convulsions occurred every two hours until 5:30 P. M., when they ceased entirely. Catheterization at 10:30 A. M.; bladder mpty. At 4 P. M., urine 12 ounces, solid albumen by heat and nitric acid; at 10 P. M., 16 ounces, one-fourth albumen by estimate; urine was taken by catheter for five days; only a trace of albumen after second day; consciousness fully restored on fourth day; patient is now, eight weeks elapsing, in perfect health. Three of the hypodermic punctures produced painful and tedious abscesses; careful examination of cervix, urethra and perænum prove them uninjured.

Special facts in history of patient: her mother died at term of puerperal convulsions—mother's sister also of same; grandmother, maternal side, of same; and mother's niece, cousin of Mrs. C., died also of same—a somewhat remarkable history!

Points of treatment: the prompt dilatation of the os by digital manipulations; hypodermic use of chloral and ergot; disuse of opium in any form; continuous anæsthesia by ether and chloroform.

Anticipatory treatment: cathartics, diuretics, venesection.

Reflections:—Was venesection useful and would repetition of same after convulsions be advisable? Does opium relieve or increase cerebral congestion in albuminuria? Does ergot protect, by its hemastatic quality, the brain from hemorrhage or effusion? What is the special influence of chloral upon convulsive phenomena?

I gratefully acknowledge my obligation to Drs. J. W. Keene and A. Dagenais for valuable counsel and co-operation in the management of the case.

A CASE OF VESICULAR MOLE.

REPORTED BY A. S. COE, M. D., OSWEGO, N. Y.

MRS. D., aged forty-two years, living in the country eight miles from Oswego, consulted me Nov., 1876. She brought with her the remains of four or five cysts preserved in alcohol; they were shriveled and corrugated by the action of the alcohol, and of a yellowish white color.

In 1866 she was delivered, with forceps, of a still-born child, after a protracted labor of four days and five nights. June 10th, 1872, she had an abortion at the commencement of the third month of pregnancy, but clots only came away as far as she observed.

In ten days from the beginning of the attack, the discharge had nearly ceased, and she resumed her household duties.

Her catamenia appeared twenty-five days after her recovery, and it has returned up to the present time, with a tolerable degree of regularity; the menstrual flow has been somewhat more profuse and protracted than before the abortion, but not to such

an extent until quite recently as to materially impair her health or strength. Only once, September, 1876, had the hemorrhage been very profuse and alarming, at which time it continued excessive for twelve hours. Two years after the abortion she observed a watery discharge subsequent to each menstrual flow, and lasting about three days after which she noticed small cysts with the watery discharge, similar, but rather smaller in size, to those she brought for me to examine.

The cysts became larger in size after each successive menstrual period until they attained their present growth. They varied from six to fifty in number; she also observed that her abdomen was enlarging. The uterus, it was found, upon examination, had enlarged to the size of the third month of pregnancy, and apparently symmetrical in its growth—the cavity and neck measuring seven inches, and the sound deflecting to the right; the os was slightly patulous. Upon withdrawing the sound, two cysts about one and a half inches in length, oblong, oval in shape, and distended with a semi-gelatinous fluid, resembling the gelatin of Wharton, followed. Ergot was prescribed. Nothing more was seen of the patient until the last of February following. The ergot had produced no effect; she had continued to discharge the vesicles after each menstrual period as before; abdomen had not increased in size, and her health was about the same.

She had become much alarmed, and urged that some attempt should be made to remove the contents of the womb. Dr. Dewitt was called in consultation; the neck of the womb was dilated and an exploration made. Nothing was found save one cyst, which had adhered to the inner end of a sponge tent and came away with it.

Menstruation continued with the same degree of regularity, discharging the usual and varying amount of cysts, until July, 1878, when she had an attack of rather profuse menorrhagia, lasting six hours. In November following she had an entire suppression of the menses, which continued four months. Dur-

ing the time of suppression she discharged no cysts, nor did her womb materially enlarge. In March, 1879, she again menstruated excessively for a period of two days, but no more than the average number of cysts came away. She again menstruated three weeks afterwards and flowed but little, but discharged a large number of cysts, which discharge was prolonged several days beyond the usual time; they varied more in size and seemed more pliable. Her general health had continued tolerably good up to this time, save some swelling of the ankles, slight shortness of breath and palpitation of the heart at times. She has enjoyed a fair degree of health up to the present.

She is now very irregular, her periods varying from two to three months apart. Since August last no more cysts were discharged until October, the last time she came under observation. Her uterus had enlarged to the size of the fourth month of pregnancy. Her general health had improved.

The above history presents some noticeable features unusual in the development of hydatiform mole: (1.) Slow growth and length of time from the abortion before the symptoms attracted attention. (2.) The discharge of cysts after each menstrual period, thereby preventing a rapid enlargement of the uterus; and it seems that the rapidity of growth and fecundity of the cysts depended greatly upon the menstrual molimen, as there was no increased enlargement of the uterus, or a greater number of cysts discharged, even after a suspension of the menses for four months; in fact the uterus seemed to enlarge more when the menses were the most active, and the intervals shortest. (3.) Absence of frequent and dangerous hemorrhages. (4.) The length of time which the disease has lasted (now over seven years) without seriously impairing the health of the patient. She has been interrupted only by brief intervals in pursuing her household duties, at the same time taking care of a small dairy. Dr. J. W. Underhill, in a monograph published in the *Obstetric Gazette*, Cincinnati, January, 1879, upon hydatiform mole, says: "It is rare that the hydatiform mole is retained longer

than the sixth month ; but exceptional cases occur in which its existence is prolonged to the usual period of normal pregnancy, or even much longer. An instance is given of its continuance during the ordinary term of gestation in Braithwait's *Retrospect*." He quotes Montgomery, who refers to Madam Boivin's work, page 74, which contains a table showing the number of months intervening in thirty-two cases, between the commencement of pregnancy and the expulsion of the vesicular mole, from which it appears that while in some instances they were expelled at three months, and in one case not until fourteen months, the average period being between six and seven months. He says : "Instances of much longer delay in their expulsion are given by others." Morgagne says : "Nor are examples wanting of a long-continued dropsy solved by a very great number of hydatids discharged from the uterus." Lassions speaks of a widow who had the abdomen enlarged more than five years before her death ; on examination the uterus was found extended by hydatids. Percy, Litre, Jolly, Baudelocque and Madam Boivin relate instances of the expulsion of hydatids from the uterus at ten, eleven, twelve and a half, and fourteen months after conception, and Dr. Ryan says he knew a case of hydatids continue fourteen years, after which time several pints were discharged mixed with purulent matter. One of the cases above quoted differs from nearly all of this form of pregnancy, in the fact that the size of the abdomen was no greater than if the gestation had been normal.

Dr. R. A. Cleeman, of Philadelphia, reported in the *American Journal of Obstetrics*, May, 1875, a case in which, at the fourth month, the abdomen was as large as at the seventh month of pregnancy. Dr. P. S. Murphy, of Washington, D. C., reports a case in the *Obstetric Gazette*, July, 1878, where at the fourth month the uterus had attained the size of six months' natural gestation. These two cases are confirmatory of what is generally observed as to the rapid enlargement of the uterus to a capacity disproportionate to the supposed stage of pregnancy." The in-

stances quoted above show that the usual course of the abnormal growth is a rapid development to a size sufficient to stimulate the uterine fibres to contraction, thereby often expelling the mole *en masse*.

This case is of unusual interest not only from the slow growth of the mole, and discharge of the cysts after each monthly period, but from the fact that she is near her menopause, and also that the disease seems to be partially held in abeyance during intervals of suppression.

COLLOID DEGENERATION OF THE OMENTUM.

REPORTED BY A. G. CRITTENDEN, M. D., CLIFTON SPRINGS, N. Y.

MR. B., aged sixty-three years, temperate, of active habits, light complexion, died in May last. Three years previously he complained of some renal disease, acidity of the stomach, abdominal enlargement, and at times nausea and vomiting; was tapped seven times, the fluid being thin at first, and afterwards thick as jelly. During all this time there was but little abdominal tenderness and pain.

Autopsy twenty hours after death: The omentum weighed fifteen pounds, and was composed of fibrous tissue, the interstices being filled with white jelly like bodies the size of peas and smaller; a mass of colloid, in quantity about two quarts, of the consistency of the white of egg, apparently secreted from the omentum and peritoneal coating of the intestines; portions of the peritoneum were ulcerated in circular patches; between the peritoneum and skin, in the abdominal walls, were found several round bodies as clear as glass, sections of which were of the size of a dime, and smaller; other organs were nearly healthy.

.TRANSLATIONS.

THE TREATMENT OF INTERMITTENT CONVERGENT STRABISMUS IN CHILDREN BY MYDRIATICS OR MYOTICS—BY DR. BOUCHERON.

FROM THE FRENCH, BY LUCIEN HOWE, M. D.

IN the great majority of cases, as Donders has shown, strabismus depends upon the hypermetropic form of the eye.

Persons with such eyes must exert their accommodation even for distant objects, and are obliged to make excessive efforts to see those near at hand.

But the eye is so adjusted that any accommodation for a near object necessitates a convergence of the axes of vision toward that point. The muscles of accommodation and of convergence are excited by the same nerve (*motor oculi communis*), and these two actions are therefore "associated." The accommodation, however, *controls* convergence, which is really a secondary action; and if an unusual effort is made in accommodating, excessive convergence inevitably follows.

Now, hypermetropic eyes, being so constructed that they are obliged to accommodate strongly, are continually called upon to converge unnaturally, in other words to be "crossed." And this is the case at first, momentarily, when actuated by unusual efforts of accommodation or by some cerebral excitement; and afterwards the habit is established, the intermittent strabismus then becomes permanent, the muscles having contracted in an abnormal position, and being thus rendered fixed, the condition is curable only by an operation.

But, while the strabismus is still intermitting, when the habit is not yet fully developed, it is possible to obviate the strabismus by meeting the indications.

The excessive accommodation and the unnatural shape of the eye are, as we have seen, the two prime factors originating the strabismus.

We must, therefore, act on these. Inasmuch as accommodation regulates the convergence, and excessive accommodation necessitates abnormal convergence, let us do away with accommodation, and at the same time we suppress the unnatural convergence and the strabismus.

Nothing is more simple. A solution of atropine dropped into the eyes, paralyzing the accommodation, also arrests the tendency to convergence, and in a few days (from ten to fifteen) the intermittent strabismus will have disappeared.

As an equilibrium between the ocular muscles is thus established, the natural development and growth of the child will render it more fixed, and after some months—three, five, eight or ten, according to the age of the child—the cure will be permanent. As in the majority of cases, the convergent strabismus is at first intermittent, it appears that this method is applicable to a larger number.

After the disappearance of the strabismus, it is important to correct the unnatural shape of the eye, in other words, the hypermetropia, by means of appropriate glasses. This is especially necessary when the child is of such an age as to use its eyes continually in study.

All the mydriatics, atropine, duboisine, etc., have about the same advantages, when thus used. Myotics, such as esserine, can also be used, for they contract the ciliary muscle firmly, and thus disturb the pre-existing relation between accommodation and convergence; but they are preferable toward the end of the treatment when attempts are made at reading. These agents, when employed in suitable doses, are absolutely free from danger, even to young children.—*Union Medicale (Annales d'oculistique)*.

HOW TO GRASP THE PELVIS FOR FIXATION IN CONTRACTION OF THE HIP—BY DR. R. GERSUNY.

TRANSLATED FROM GERMAN BY HERMAN MYNTER, M. D.

If a patient, with a contraction of the hip-joint, which is disguised by the oblique position of the pelvis, lies on his back on

a level surface, the diseased leg touches with its posterior part the mattress, while the lumbar vertebræ are curved forward. If we now take hold of the healthy femur and bend it passively until it touches the chest, we see that the arch, which the lumbar vertebræ form above the mattress, flattens more and more as the flexion of the healthy hip-joint increases. At last the column of the lumbar vertebræ is perfectly straight. At the same time the diseased femur rises from the mattress, and cannot be pressed down as long as the healthy femur is fixed. The cause of this is that the pelvis is fixed forcibly by aid of the passively flexed healthy leg. I shall only further point out that this position of the body may be of use both in *brisement forcé* and in gradual stretching of the hip-joint, whether we use passive manipulations or apparatus for extension. I was able to convince myself of the practicability of the method in question, both in *brisement forcé*, on account of contraction of the hip following coxitis, and in passive movements in cases of paralytic contraction with healthy hip-joint.

I have had no opportunity of trying whether this method may be of use by permanent extension. This might be done easily by fixing the flexed healthy femur, by aid of a broad band, while the diseased leg was permanently extended downward.—*Centralblatt fuer Chirurgie*.

SELECTIONS.

SOLVENTS OF GALL-STONES.

IN the *Boston Medical and Surgical Journal* for Oct. 23, 1879, Dr. T. H. Buckler directs attention to the recent triumphs of and accessions to surgery with reference to the recent boasts that already the gall-bladder had been invaded by the surgeon's knife, with the object of removing therefrom biliary calculi. Dr. Thomas, in the able address delivered before the Gynecological Society, related this as an example to illustrate the progress

and paramount importance of surgery. Dr. Buckler, however, affirms that if there is any one thing that does and must forever belong exclusively to the department of practical medicine, it is the ready means physicians have at command of being able always to dissolve in the gall-bladder cholesteric gall-stones with as much certainty as if these same calculi were in a glass tumbler.

Eight or ten years ago a paper was published in *Ray's Journal* recommending chloroform in doses of from five to sixty drops every four to six hours, as a sure means of dissolving calculi in the gall-bladder, however large and numerous they might be.

In the *American Journal of Medical Sciences* for July, 1867, Dr. Buckler advised the use of the succinate of iron as a solvent of gall-stones and of cholesteric fat, whether in the arteries or elsewhere. This preparation contains more nascent appropriable oxygen than any other known therapeutic agent, and of all the feruginous articles is one of the very best for malarious cachexy, or for any other condition where the blood-globules diminish or need rehabilitation. In all hepatic diseases in which nitric and hydrochloric acids are usually prescribed, the succinate of iron will be found more efficacious.

In critical and urgent cases of gall-stone, where no time can with safety be lost, Dr. Buckler prefers the conjoint use of terchloride of formyl, and Stewart's preparation of the succinate of iron. In the last three cases treated successfully, the administration of both chloroform and succinate of iron was commenced as soon as the existence of a gall-stone was established beyond a reasonable doubt, giving the former in doses of ten drops every four hours, and of the latter a teaspoonful half an hour after each meal. In two instances the patients were able to take a teaspoonful of chloroform every six hours without any ill effect. These doses dissolved the calculus within the space of a single week.

Dr. Buckler states that he has seen a number of cases of gall-stone which were successfully treated with chloroform to dis-

solve the cholesterine existing in the gall-bladder at the time, and causing paroxysms of pain amounting to positive anguish.

After existing calculi have been dissolved, then, to overcome the cholesteric diathesis, and to prevent the formation of other stones, the patients were kept on teaspoonful doses, thrice daily, of succinate of iron for a period of four or six months.

Of all the certainties of medicine, there is nothing more absolutely sure than that chloroform will in every instance dissolve calculi in the gall-bladder. When taken into the stomach it passes with the blood of the portal circulation, out of which bile is made, directly to the acini of the liver, and is carried with the newly-found biliary fluid to the gall-bladder, where its solvent power is effectual. Sometimes cholesterine clogs the acini and lesser biliary ducts, producing jaundice, in which cases this otherwise obstinate trouble is promptly relieved by giving chloroform. Ether has been recommended for the same purpose, but is not as reliable, owing to the difference in the specific gravity of these two agents, ether being the most diffusible, and floating in water, while chloroform sinks in it. According to Dr. Buckler's observation, chole-lithiasis is found four times in women where it occurs once in the opposite sex.

The surgeon has a fair field for trial of the proposed solvents before resorting to an expedient so hopelessly perilous as the knife.

[We have during the last eight years treated with complete success more than twenty cases of chole-lithiasis by the use of succinate of the per-oxide of iron alone.—EDS.]

PHOSPHIDE OF ZINC.

PHOSPHIDE of zinc has proven a most efficient agent in the successful treatment of a certain class of affections. In very many instances it has been far more curative than phosphorus. Considered in the light of a curative agent, the phosphide of zinc stands alone, not only for the certainty, but for the rapidity

of its action as a nervous tonic and stimulant. Its value, in these respects, has of late been fairly tested in the last and exhaustive stages of typhoid and other fevers, where the nervous energies have been so far prostrated as to render convalescence, if not doubtful, at least tedious and protracted. The great therapeutic value of the phosphide is evinced in the most distinct manner when used in the treatment of neuralgia. While phosphorus is seldom curative in doses of less than one-twentieth or one-tenth of a grain, phosphide of zinc yields as reliable and more speedy results in doses of one-tenth to one-eighth of a grain. Few stomachs can tolerate more than one-thirtieth of a grain of phosphorus before manifesting symptoms of irritation, which, in connection with the "matchy" taste soon evolved in eructations, often engender a disgust to its further continuance. On the other hand, experience with the phosphide of zinc has proven that it enters the circulation far more readily than the element, and in doses of from one-eighth to one-twelfth of a grain produces its curative influence far more rapidly, and is equally as permanent in therapeutic power.

It has been found extremely serviceable in neuralgia, in angina, in loss of memory and impotence, in loss of sleep from combined mental anxiety, and generally in those nervous affections that owe their origin to exhaustion and depression of the nerve force. Dr. Hammond's formula is one-sixteenth grain phosphide of zinc with one-fourth grain of ext. tinct. vomica, made into a pill.

A NEW METHOD OF ADMINISTERING KOOSSO.

Of all the remedies for tape worm, none is more certain or efficient than Koosso, and many efforts have been made to bring it into such pharmaceutical shape that, while its properties as a tonicide remain unimpaired, it might be administered without repugnance. Dr. Corre, some years ago, proposed the following method which has been successfully used in many cases: One-

half ounce of fresh-powdered koosso is treated with one ounce of hot castor oil, and afterward with two ounces of boiling water by displacement; express, and by means of the yolk of an egg combine the two, percolate into an emulsion, and add forty drops of sulphuric ether, flavoring with some aromatic oil.

This is to be taken at one dose early in the morning, after a previous fast of about eighteen hours. The worm is usually expelled dead after six or eight hours.

EARACHE, CHLOROFORM VAPOR.

Dr. Morgan states that he had often promptly relieved the distressing earache of children, by filling the bowl of a common new clay pipe with cotton wool, upon which he dropped a few drops of chloroform, and inserting the stem carefully into the external canal, and adjusting his lips over the bowl, blew through the pipe forcing the chloroform vapor upon the membrana tympani.—*National Medical Review*.

BENZOATE OF SODA IN DIPHTHERIA.

DR. LETZRICH, of Berlin, has been studying the effect of the above remedy in diphtheria. It has been shown, he alleges, by the experiments of Graham, that this remedy when introduced into the system in sufficient quantity will put a stop to the "vegetation of the specific poison." The amount necessary for this purpose is determined by the weight of the body. In this manner, accordingly, the dose for children and adults is regulated, and it is claimed by him, that up to the present time, there is no other remedy that exercises so rapid, continuous and therapeutic an effect upon the development and cause of the diphtheritic process as benzoate of soda. The dose for children between one and three years old is given as seven to eight grammes (100 to 120 grains), dissolved in three and one-half ounces of the vehicle, the whole amount being given in the course of the day, in half to one tablespoonful doses.

For children between three and seven years of age, eight to ten grammes (2 to 2½ drachms) are given in the same way.

Those over seven years old take ten to fifteen grammes, and adults fifteen to twenty-five grammes daily—dissolved in a suitable vehicle.

The diphtheritic membrane was treated with benzoate of soda or powder being sprinkled on or applied through a glass tube or quill. There is no slough formed, and thereby the danger is averted of its acting as a firm covering under which an energetic growth and development of the organisms may take place.

The insufflation was made every three hours in severe cases, in the milder form two or three times daily. With older children a simple solution of the salt was used as a gargle.

The author cites the following case as a typical illustration of the way the medicine acts upon the general infection, the effects being quite uniformly noticed after twenty-four to thirty-six hours. W. L., eight years old; treatment began June 19, the second day of the disease; June 19, evening, 106.3° Fahr., pulse 136; 20, evening, 102.2° Fahr., pulse 124; 21, morning, 101.6° Fahr., pulse 114; 21, evening, 100.4° Fahr., pulse 112; 22, morning, 99.5° Fahr., pulse 104; 22, evening, 98.6° Fahr., pulse 104; 23, temp. normal, pulse normal.

In the above case the membrane on the tonsils was very extensive and was powdered. On the 2d day of the disease it became circumscribed, thinner and somewhat more transparent, and on the fifth it had nearly disappeared. The medicine was continued for a few days after this date, but at longer intervals, and the small exudation spots were powdered twice daily, until the last remaining portion had completely disappeared, on the 8th day of the disease.

The records of many other children equally severely affected, and of different ages, gave nearly the same results as the above, and the effects of the medicine were always the same. The author recommends this remedy highly in gastric and intestinal disease, particularly of infants, and states that at times the results are surprising in the latter cases. He recommends it likewise in catarrh of the bladder, and firmly believes in the statement

of Klebs, that it is to be recommended in all diseases which originate by infection.—*Boston Medical and Surgical Journal*.

A SIMPLE METHOD OF PREVENTING MAMMARY ABSCESS,

BY FRANCIS J. SHEPHERD, M. D., M. R. C. S.

THERE is, I suppose, no accident which brings more discredit, or gives more trouble to the surgeon, than the occurrence in his practice of a "broken breast" case. Many remedies, such as belladonna, hot oil, frictions, etc., have been advocated to prevent this painful affection, but I have found none more efficacious and speedy, than the following simple plan, which has been used for years with great success by old women in country parts; in fact, it may well be called, what indeed it is, an "old wife's remedy." When the gland becomes indurated, painful, and has a glistening red look (symptoms, in fact, of approaching suppuration), take a large piece of ordinary sticking plaster, and cut in a circular shape (a larger or smaller disc according to the size of the affected breast), make a hole in the centre, large enough to admit the nipple, and half the areola to be seen, and apply this piece of plaster, after heating it, so that it will cover the *whole* breast, and that the nipple will protrude through the aperture in the centre. To make the plaster fit more accurately, its circumference should be deeply nicked, at distances of about an inch. The plaster should be left on until the breast softens, or the plaster ceases to exercise even pressure. This simple method, in the half dozen cases I have seen it used, has acted magically, the breast softening, and the pain disappearing in the course of twenty-four hours. In one case a woman, who had suffered on previous occasions from broken breasts, came to the out-door department of the General Hospital, with all the symptoms of fast approaching suppuration in her right breast; in fact, I considered that within twenty-four hours, I should be obliged to use the knife. However, I said to the students that if there was anything in the plaster remedy, this would be a good case in which to try it. I applied the plaster in the way described above. Two

days after, the woman returned, and said, with a pleased smile, that it was the only remedy she had ever tried that had done her any good; that on previous occasions every remedy had failed to prevent her having "broken breasts." On examining the breast, I found it quite soft, painless, and with only one small lump of induration on the upper part, which disappeared in the course of a couple of days. In another case, where an abscess, due to depressed nipple, threatened, I applied the plaster as before, and in twenty-four hours, there was hardly any induration and no pain. In multipara, where the breast is dependent, in addition to covering the breast with plaster, I should advise supporting the breast by a band of plaster, one inch and a half broad, passing under the breasts from shoulder to shoulder. I may say, that I have only used this remedy in cases of threatened abscess due to distension of the milk ducts, depressed nipples, and obstruction to a free flow of milk, due to exposure to cold. I imagine the plaster acts simply by exercising an even pressure on the breast, and giving support to it.—*Canada Medical and Surgical Journal*.

BELLADONNA IN POISONING BY OPIUM.

✓ DR. C. H. LEWIS, in the November number of the *Detroit Lancet*, gives an interesting account of a case of poisoning with morphine, treated with subcutaneous injections of atropine. He believes belladonna to be the remedy *par excellence* in opium-narcosis, but that it must be given in heroic doses.

On the 22d of August, 1879, a lady took by mistake fully half a teaspoonful of morphia sulphate. About an hour was spent by another physician in procuring emesis, before Dr. Lewis saw the patient. At this time the stage of excitement was passing into that of stupor; the face was flushed, the eyes lustrous, but very prone to close, the pupil contracted, the skin warm and the pulse full and slightly accelerated. The patient could answer questions, but the last words would be lost in sleep, from which she would be suddenly roused by the head dropping forward.

The stomach was emptied with a full dose of sulphate of zinc, filled with water and emptied again, then a strong decoction of coffee given, at intervals, as long as the ability to drink it remained. Later, about two fluid drachms of the fluid extract of coffee were administered hypodermically. One twenty-fourth of a grain of sulphate of atropia was now injected subcutaneously, in fifteen minutes one-sixteenth of a grain, and the latter amount again in fifteen minutes.

No effect being perceived at the end of thirty minutes, one-eighth of a grain was injected. Not long after, the pupils began to dilate, and in an hour covered about one-half the iris. They remained at this degree of dilatation, and utterly unresponsive to light, with conjunctivæ insensible to touch. Notwithstanding this expansion of the pupils, and although derivatives to the skin were vigorously applied, the stupor became more profound, respiration more slow and shallow, the pulse more frequent and feeble, and the surface more cold and pale. Although none of the physicians present had any expectation of her recovery, the doctor continued to administer one-eighth of a grain, at intervals of about an hour. Faradization was employed for fully two hours, with the apparent result of raising the respiration from seven to twelve per minute. The first injection was given at 1 P. M., and the last at 7:15 P. M., and after the last dose its effect on the surface, pulse and respiration began slowly to manifest itself. At midnight the pulse was 100, regular and stronger, respiration 14, full and easy; face slightly flushed, and entire surface warm. Improvement progressed, and at 4 A. M. she fully awoke, the period of profound coma having been fourteen hours, and one grain and one-sixteenth of atropia having been administered subcutaneously.

TREATMENT OF COLIC.

Phares' method consists in inversion, or simply turning the patient upside down. Colic of several days duration is so relieved in a few minutes. The elbow knee position or laying on

the face, head, and shoulders hanging down over the side of the bed may answer; complete inversion however is the best.—*Atlanta Medical and Surgical Journal*.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, December 2, 1879.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

AN unusually large number of members were present, together with medical students and others specially invited. The paper was read by Honorable George W. Clinton whose subject was "Malpractice." (See original communications.)

When the speaker had concluded his paper, Dr. White moved that the thanks of the Association be tendered Judge Clinton for his able, eloquent and instructive address.

The subject of medical jurisprudence, said the Doctor, was one with which he had had very much to do. He had often been called upon to testify in cases of malpractice.

The medical expert, when upon the stand, is not expected to know everything. To questions involving an uncertainty, or touching the superiority of his own skill, it is best to say in reply that we do not know. We should not speak for ourselves, and always give good reasons for any statement made.

Thirty-five years ago he was sued for malpractice, when what is termed a "struck" or "select" jury was obtained. It was the only case of the kind ever occurring in this part of the State. He was sued for an imperfect cure of a fractured thigh. He proved, by the plaintiff's own witnesses, that it was an average cure, and that the directions were not obeyed. There were two trials, the jury disagreeing in both. When the case was finally presented to the select jury of more intelligent and unprejudiced

men, and after hearing the testimony of such men as Willard Parker, Frank H. Hamilton, John Delamater, Prof. Ackley, of Cleveland, and many others, scarcely leaving their seats for deliberation, they immediately brought in a verdict for the defense, involving, however, great expense in defending an attack, the chief merit of which consisted of an assertion that the plaintiff was poor, with six children,

Till that time, suits for malpractice were of frequent occurrence, nearly all the leading practitioners having suits brought against them—the object of the plaintiff being to effect a compromise. In the case just narrated, this could have been done at a cost much less than that of a trial.

Prof. White was of the opinion that suits for malpractice were ordinarily the result of a thoughtless remark on the part of some rival practitioner. He always esteemed it his duty, as well as pleasure, to do what he could to defend a fellow-physician.

After dwelling at some length upon the unfairness of the present system, he called for the adoption of the motion.

Dr. Miner expressed his thanks to Judge Clinton for the lecture, and added that he had been almost convinced of the equity of our legal code. The “ruling of the Court” was not always the “ruling of the jury,” which latter, unfortunately, was too often unjustly detrimental to the physician. If men are sufficiently intelligent to form an opinion on the question to be decided, they are, on that very account, disqualified to serve on a jury. Suits for malpractice are not infrequently “worked up” by unprincipled lawyers, who hope to benefit themselves and their clients financially, by robbing the physician of both money and reputation. Such legal adventurers are as numerous as are quacks in medicine. In closing, Dr. Miner again complimented the Judge upon the excellencies of the paper and hoped that the motion of Dr. White would be adopted.

Upon being put to vote, the resolution was adopted unanimously.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

Twelfth semi-annual meeting of the Medical Association of Central New York, held in Association Hall, Syracuse, Nov. 18, 1879.

The President, Prof. Frederick Hyde, M. D., of Cortland, called the meeting to order, and made a few appropriate remarks, congratulating the Society on its past success and continued prosperity.

The minutes of the last annual meeting were read by the Secretary, Dr. C. E. Rider, of Rochester, and adopted.

The President announced the following committees:

On Credentials—Drs. Alfred Mercer and M. B. Fairchild, of Syracuse, and J. O. Roe, of Rochester.

On Business—Drs. I. N. Goff, of Cazenovia, A. G. Crittenden, of Clifton Springs, and T. Dimon, of Auburn.

Dr. W. W. Potter, of Batavia, read a paper on "Rectal Alimentation," giving in full a report of a case where such means were used, and laying down explicit indications for rectal alimentation in cases of nausea from gravid uterus.

Dr. Creveling, of Auburn, doubted whether nutritious substances so injected, passed above the colon, or were digested.

Dr. Crittenden mentioned a case where mercurial inunction seemed to relieve a severe nausea dependent upon pregnancy.

Dr. J. O. Roe read a paper on pharyngeal tuberculosis, giving his minutes of a case which ended in death from pulmonary disease.

Dr. Creveling mentioned a case in his practice where the edges of the pharyngeal ulcer projected into the pharynx, contrary to the rule, and where the larynx has subsequently become involved.

Dr. Crittenden read a paper on colloid degeneration of the omentum, detailing a case which had occurred in his practice. (See Clinical Reports.)

Dr. M. D. Benedict, of Syracuse, mentioned a case of omental cancer which he had observed in the army.

Dr. C. C. Bates, of Auburn, had also seen such a case in a female, where an early diagnosis was difficult on account of the sex.

Adjourned for dinner.

AFTERNOON SESSION.

Dr. D. C. Crumb, of Chenango County, stated that he had observed three cases of cancerous disease of the liver in one family.

The question of hemorrhage from paracentesis abdominis arose, and Drs. Mercer, of Syracuse, and Gilmore, of Cayuga County, cited cases.

Dr. Starr, of Rochester, quoted Dr. Syme, of Edinburgh, who mentions some six cases where dangerous hemorrhage followed paracentesis.

Dr. Darwin Colvin, of Clyde, then read a paper on prolapse of the ovary, citing several cases where such a diagnosis was made, and outlining the methods of treatment.

Dr. E. Van DeWarker, of Syracuse, did not think the displacement mentioned was a rare one. The extreme mobility of the ovaries predisposes to such a result. He cited a paper by Munde as a valuable one.

Prof. W. W. Porter, of Syracuse, recalled six cases of this disease in his practice, five of which were on the left side.

Dr. J. E. Carr, of Jordan, then exhibited, as a pathological specimen, an exudate from the uterus.

Dr. A. S. Coe, of Oswego, read a paper on hydatid moles. (See Clinical Reports.)

Dr. C. S. Starr, of Rochester, read a paper on Bronchocele.

Dr. J. E. Carr said that he treated goitre with as much confidence as ague. The remedies are iodide of potassium internally, and tinct. iodine externally. He never saw a case that did not yield, if so treated, during its early stages.

Dr. Craig, of Churchville, agreed substantially with Dr. Carr.

Dr. Didama, of Syracuse, remarked that some cases do well with iodine, while many cases do not yield to any treatment.

Dr. Hoxie cited the case of a man with goitre treated with iodine. The tumor increased, although treatment was continued for a year.

Dr. Colvin said he had treated goitre for 35 years, and never saw a case get entirely well. The tumor will perhaps diminish for awhile, but is prone to increase again. He did not believe that any remedy could be considered a specific. Some cases improve without treatment.

Dr. Starr said he had spent some time in Vienna, and on the slopes of the Alps where cases of goitre abounded. European physicians state that cases of over two years' duration are seldom cured.

Dr. R. W. Pease, of Syracuse, did not doubt that good might come from treatment. He thought well of electrolysis in some cases, but even if temporarily relieved, the disease was apt to return.

Dr. Hyde thought that the general health should be especially attended to in such cases, especially where the subjects were young women.

Dr. Goff saw a case cured by the hypodermic injection of ergot.

Dr. Van DeWarker, of Syracuse, then read a paper on the operation for laceration of the cervix uteri, and exhibited his instrument by which many difficulties of the operation are overcome.

Dr. Clark, of Oswego, then read an elaborate paper on puerperal convulsions. The treatment recommended was the hypodermic injection of morphia. He injected fearlessly a grain and a half for the first dose. Given in divided doses, morphine was impotent—its action should be intense.

This proposition elicited much discussion, some gentlemen supporting warmly the views of Dr. Clark.

Adjourned to meet in Rochester, May 18, 1880.

CHARLES E. RIDER,
Secretary.

EDITORIAL.

GRATUITOUS SERVICES TO CLERGYMEN.

SEVERAL of the medical periodicals, *The Philadelphia Medical Times* and *The Medical Record* among the number, have been discussing, of late the question why clergymen receive gratuitous attendance from the medical profession. The special tax thus imposed upon physicians and also upon druggists, who are fellow-sufferers from like impositions, has long ago given rise to serious doubts as to its justice, from many of our most enlightened men. Our esteemed contemporaries wisely conclude that this custom should be abolished, and clergymen placed on the same level with all other classes and professions requiring and seeking medical services. It is true that many clergymen are poorly and inadequately compensated for the ability, erudition and zeal they bring to their sacred calling. To all such, the medical profession is only too willing to lend the helping hand, and to show their practical appreciation of self-sacrificing labors in the interests of humanity, by responding to their calls. But in cases of clergymen who receive annually a salary of two or three or five thousand dollars, more than the majority of physicians can by any possibility earn, we fail to see the justice or the wisdom of this exhibition of purely American philanthropy. If the profession estimate the good-will and favor of the clergy to be of assistance in building up a practice, hoping, figuratively speaking, that the sheep will follow their shepherd, they are too often grievously disappointed. *The Record* well says that practice obtained by such means "is not worth a great deal, especially if the unfortunate practitioner has the representatives of all the denominations in his village on his list. Even then it is quite likely, that his distinguished patient may recommend some quack to his parishioners, especially if that individual has made a fortune, and is a prominent pewholder in the church. The good influence which might be created in behalf of legitimate medicine is thrown into another channel, and charlatanry is

endorsed not only in religious papers, by widely circulated certificates of remarkable cures, but even in the pulpit itself." This confirms our own experience that clergymen, strange and inconsistent as it may appear in view of their boasted intelligence, are often the most willing dupes of the basest medical imposters.

We fail to find any valid reason for these gratuitous services. The majority of the profession are members of or attendants on some of the religious bodies, and share in the expense of their maintenance, paying their quota of the minister's salary. On what principle, certainly not of equity and justice, are they expected to dispense to the clergy, without compensation, the skill and knowledge, acquired at a large expenditure of money, and of patient labor and effort, while the mechanic and laboring man enjoy no such exemption?

Besides, it is a fact that services, thus freely and generously rendered, are but poorly appreciated by our clerical patrons. We do not approve of pauperization, whether among the genteel and educated, or among the ignorant and vulgar. No class of men, professional or otherwise, are beyond the reach of such demoralizing influences. We approve of a just compensation for the clergy, as well as for lawyers, teachers and mechanics, and we especially endorse the apostolic injunction that the clergy should "owe no man anything," not even their doctor, "but to love one another," in which category we trust the profession of medicine, always abundant in good works in ameliorating the sufferings to which flesh is heir, may be included.

REVIEWS.

A Ministry of Health and other Diseases. By BENJAMIN WARD RICHARDSON, M. D., F. R. S., &c New York: D. Appleton & Co. 1879.

Dr. Richardson includes in a volume of 354 pages, nine addresses: Ministry of Health; William Harvey; A Homily Cleric-Medical; Learning and Health; Vitality, Individual and National; The World of Physic; Burial, Embalming and Cre-

mation; Registration of Diseases; Ether-Drinking and Extra-Alcoholic Intoxication.

In the address on Burial, Cremation and Embalming, the author, while expressing a preference for cremation, frankly confesses that "with all the fascinations of science which surround it, and with all the advantages which science lends for its development, it is simply impossible, as a general principle, at this imperfect stage of civilization." He contends, however, that the man of science should teach "that nature demands for the perpetuation of the living present, not the far removal, but the quick return of the dead body into the mother earth; that the world of life, constructed from a limited supply of matter, rebuilds itself out of the quarry of death, and that the plan which has for its object the restoration of the body to the earth, with the least possible interruption to the ordination of nature, should be accepted as the wisest plan."

The work is full of clear and forcible suggestions on subjects allied to sanitary science, and adds to the reputation of the author as an accomplished writer.

L.

The Pathology and Treatment of Venereal Diseases. By FREEMAN J. BUMSTEAD, M. D. Tenth edition, revised, enlarged and in great part rewritten by the author and by ROBERT W. TAYLOR, M. D., Professor of Skin Diseases, in the University of Vermont. Philadelphia: Henry C. Lea.

Scarcely had this work appeared, when the sad intelligence reached us from New York, that the author, Dr. Freeman J. Bumstead, was dead. He died November 18th, after a protracted illness, but 53 years of age, being, at the time of his death, President of the New York County Medical Society. Thus a clear mind has passed away, and a valuable life is finished, but yet he will live in the memory of a grateful profession. His book is the best monument he could leave behind him.

The book itself is well known, but the new edition is so greatly enlarged and rewritten that it may be considered a new work.

It is naturally divided into three parts, Gonorrhœa and its complications (338 pages), the Chancroid and its complications (80 pages), and Syphilis (400 pages), giving a clear and concise statement of our present knowledge of venereal diseases. We earnestly advise the profession to buy this little book, not only on account of its general excellence and great clearness, but also as a fitting tribute to its late author. M.

Infant Feeding, and its Influence on Life; or, the Causes and Prevention of Infant Mortality By C. H. F. ROUTH, M. D., F. R. C. P. L.
Third edition. New York : William Wood & Co. 1879.

We have given this work a careful and attentive perusal, and with a deep interest in the subject of which it treats, have come to endorse the wise judgment of the publishers in giving to the American profession the privilege of adding so valuable a contribution on infant dietics and therapeutics to their libraries. The author is evidently in thorough sympathy with his subject, and with the tender patients, for whose benefit he writes. He divides the work into three parts, of which the first is devoted to the consideration of the causes of mortality and viability of infants; the second to the subject of wet-nursing in its physiological as well as social relations; and the third to the general principles and practice of alimentation, while in the concluding portion of this valuable work, we find a clear and concise review of the symptoms and treatment, dietetic, hygienic and medicinal, of such diseases as tend to shorten life, or impair vital force through defective assimilation.

From this brief statement of the scope of the author's purpose in giving to the profession this valuable treatise, it will be seen that he has undertaken a work of the greatest importance to humanity. We feel that there prevails in the profession many crude notions on these subjects. The thorough study which is here given in a condensed form, suited to the general practitioner, will be of inestimable benefit, if only utilized and studied.

L.

The Skin and its Troubles New York: D. Appleton & Co., 549 and 557 Broadway. 1879.

This little work of 94 pages is one of the Health Primer Series, and treats, in a plain and popular manner, of the structure of the skin; the functions of the skin; practical applications to the conditions of daily life; skin troubles from poisonous clothing; the hair, and its ordinary management. It is replete with useful knowledge upon subjects of great interest and importance. We commend the work to the profession for distribution in their practice.

L.

First Line of Therapeutics as based on the Modes and Processes of Healing, as occurring Spontaneously in Disease, and on the Modes and Processes of Dying as Resulting Naturally from Diseases. By ALEX. HARVEY, M. A., M. D., Emeritus, Prof. of Materia Medica in the University of Aberdeen, etc. New York: D. Appleton & Co.

While we have in the profession not a few, who fondly believe that drugs have a specific and curative power in the treatment of *all* diseases, it is well that the extremists, upon the other side of the question, who look upon the *vis medicatrix naturæ* as their only reliance, should have their say. Their views are in this book ably expressed, and notwithstanding its many sophisms, we venture to say that all who become possessors of the work will read it with pleasure and profit. Dr. Harvey takes the ground that in respect to diseases that are intrinsically curable, nature is herself adequate to the care of all of them, while in respect to those diseases, that are in their own nature incurable, art is also powerless. He denies wholly to drugs any specific curative powers. He says, page 277, "It is not we, it is not our drugs, that cure diseases; it is the organism itself which brings about spontaneously the restoration of health, through the manifold provisions, there are in the living body, for obviating the structural lesions induced by disease."

According to Dr. Harvey's notions, active therapeutics is a thing of the past, and "we may now have the inexpressible satis-

faction, every one of us, of thinking that our practice is a partnership concern of the best kind—Nature doing the chief part of the work as regards the cure, but handing over to us the fees for the work done, and with the fees the credit of the cure.”

D.

The Throat and the Voice. By J. SOLIS COHEN, M. D., Lecturer on Diseases of the Throat and Chest, in Jefferson Medical College, etc. Philadelphia: Lindsay & Blakiston.

Dr. Cohen is so well known that anything coming from his pen has a claim to our attention. In this little book, one of the health primers, he teaches the laity the common sources of diseases of the throat and voice and their symptoms, and gives general rules for their treatment. It is worth reading, and the advice it gives is sound.

M.

Diseases of Women. By LAWSON TAIT, F. R. C. S. Second edition. New York: William Wood & Co. 1879.

A Practical Manual of the Diseases of Children, with a Formulary. By EDWARD ELLIS, M. D. Third edition. New York: William Wood & Co. 1879.

These works belong to “Wood’s Medical Library Series,” and maintain the deservedly high reputation of the publishers in their judgment of the wants of the profession in selecting useful and valuable medical books. They are concise, containing within a small compass a vast amount of professional erudition, which will be duly appreciated by the profession throughout the country. We have carefully examined this series, and with each number find it more and more adapted to the object the publishers have in view in presenting so many authorities on the different subjects of which they treat, at so small a cost. Without attempting a critical review of the works, we commend them heartily, and hope the enterprising publishers will continue to present standard authors in such a compact and uniform style and form.

L.

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

CACOËPY IN MEDICINE.*

BY J. W. KEENE, M. D.

IT is a matter of daily observation that physicians differ widely in their opinions. Differences in regard to pathology, diagnosis, prognosis and treatment, are so common that the variance is voiced in the saying that Doctors seldom agree. This difference is well exemplified in the pronunciation of our medical nomenclature. It seems that whatever variance may exist in matters of judgment, the pronunciation of medical terms, which is comparatively fixed and definite, should present a nearly perfect uniformity. This uniformity, however, does not exist,—except that in many cases the pronunciation is uniformly bad.

That the pronunciation of common English words is often incorrect, even among the educated, is well-known. Nor is this always the result of ignorance as to the proper pronunciation. In this, as in other matters, bad habits contracted in youth, cling to us with deadly pertinacity. The knowledge may not be in fault; but the vocal apparatus, once accustomed to produce a given sound, returns to it with all the fatal facility of error.

*Read before the Buffalo Medical Club, Dec. 10th, 1879.

The proposition just now made, that the correct pronunciation of medical terms is comparatively fixed and definite may, perhaps, be questioned; and with some justice it is admitted. Even in regard to English words of common occurrence our authorities differ, and often permit a choice between two or more very different ways of pronouncing the same word. We will admit this as one cause of our faults in orthoëpy, so far as it holds good. Again, it may be objected that the Latin, from which our medical nomenclature is so largely recruited, is in a sort of transition state, hanging poised, like the coffin of the Moslem prophet, midway between the terra firma of substantial English, and the dreamy heaven of Continental principles of orthoëpy. And it may be well to add that this is also true of the Greek; since, with very few exceptions, words of Greek derivation reach us in the Latin form. This transition has given rise to a barbarous jargon, resulting from the mingling of the two systems, and may well be admitted as a second and important cause of our bad pronunciation. But these two causes are sufficient to explain the grievous faultiness of our pronunciation only in a measure. Errors arising from these causes are natural and excusable ones; but a large percentage of all our errors in orthoëpy are inexcusable and unnatural, and are to be explained only by the perversity of the human mind. This last cause is the dominant one, and to it may be attributed that vast aggregate of errors in pronunciation, to a few of which reference will be made in this paper.

We have all been taught in our youth that the branch of the science of language which treats of the correct pronunciation of words is called orthoëpy, from the Greek *orthos*, right or correct, and *epos*, a word. The improper pronunciation of words will, from a similar derivation, be properly called cacoëpy, from *kakos*, bad or incorrect, and *epos*, a word. And lest the very title of our paper be made an example of that which it purposes to deprecate and correct, let it suffice to say that the accent falls on the first syllable ca'coëpy, analogous to or'thoëpy.

But some who insist on saying ortho'epy, or ortho-ë'py—and their name is legion—will undoubtedly call our title caco'epy or caco-ë'py in spite of the caution. "Such is human perversity." If the term be sought for in the dictionaries of the present, the search will be in vain; but unless we reform our pronunciation of medical nomenclature, cacoëpy will be an imperative necessity in the bright lexicon of the future.

Cacoëpy, then, is our theme. It is entirely foreign to our present purpose to discuss the propriety of employing the Continental method of pronunciation in our nomenclature, or to criticise those who employ it. So many of our physicians acquire their profession in the Continental schools of medicine, or at least add to their professional knowledge by studying there, that it is not practicable nor desirable to hold them amenable to English rules of orthoëpy. It would certainly be just and reasonable to expect of them a proximate uniformity, and a pronunciation of all words strictly and essentially Latin according to Continental methods. But even this we will not insist upon. So far as it is a question of English or Continental methods we will only ask that but one system be employed in the same word. And numerous examples may be noticed hereafter of a commingling of both in a single word. The aim is not to excite opposition, but to invite attention to that which is so outrageously bad that all will agree to the propriety of correcting it. The question then of the proper pronunciation of -itis as a terminal indicative of inflammation will not be discussed, except where the pronunciation of the remainder of the word is inconsistent. The word which our English dictionaries agree in pronouncing bronchī'tis* may with perfect propriety as a Latin word be called bronchī'tis; but it is highly inconsistent to pronounce meningī'tis, vaginī'tis, laryngī'tis, &c., meningī'tis, vaginī'tis, or laryngī'tis. If the termination is pronounced -itis, according to the Continental system, the balance

*Fāte, fāt, fāther—mēte, mēt—pine, pīn, marine—tōne, ōn.
Observe the accent marks.

of the word should conform to that system, and the pronunciation becomes mā-nin-gī'tis, wā-gin-ī'tis and lar-yn-gī-tis, the g being hard as it always is in the Continental system. Thus consistency is not offended.

But a large number of physicians—it is safe to say the majority—do not consider that they are using the Continental method of pronouncing Latin when they say -itis, and are oblivious to the fact that they are employing Latin at all, save in form and derivation. They consider the words as English, and amenable to English rules of orthoëpy. Indeed, this outrage on a respectable language (and it is often doubtful whether it is the Latin or English that suffers) was habitually practiced by doctors long before the Continental method of pronouncing Latin was employed in a single public school or college in our land. But enough of this. Hundreds of examples like those cited above could readily be given, and many no doubt have already occurred to you; but time and disposition alike are wanting to present others. -Ītis, or ĩtis, it is all the same;—only let us strive to be consistent in this as in all things.

Now let us turn our attention to cases where this plea of Continental method will not excuse mistakes. The examples are so numerous that one scarcely knows what to select from such an "embarras de richesse." Prīmīp'ara, multīp'ara, plurīp'ara we have often heard called primipār'a, multipār'a, pluripār'a, even by those whose hands, wonderfully endowed with the "tactus eruditus," have conferred upon the fair candidates the initial honor of maternity—the "first degree," that of primip'ara and often, too, the "higher degrees" of multip'ara, or plurip'ara. Impeti'go, pruri'go, porri'go, &c., are wrested to impet'igo, pru'rigo and por'rigo. Verti'go as a Latin word follows the same analogy, but is Anglicised as ver'tigo or verti'go. Gynecology (jin) is often pronounced with the initial g hard, probably to indicate a knowledge of its derivation from the Greek word, *gunee*, a woman, and *logos*, a treatise; but the same rule applies to both g's; if one is hard the other should be, if either is soft both are so.

The word so often called *asthe'nia*, is properly *astheni'a*, both as an English and as a Latin word. A number of analogous words ending in *-ia* have the *i* long and accented, being derived from the Greek diphthong *ei*. Such are *synechi'a*, *exangi'a*, *neurastheni'a*, *eustheni'a*, *enteropathi'a*, *energi'a*. And, to prevent misunderstanding, it may be well to say that with the exception of these few words here cited to show analogy, every error mentioned in this paper has been heard by the writer, and many of them no doubt have been committed by him as well as by others. *Rosē'ola*, *rubē'ola*, *arē'olar*, *alvē'olar*, &c., smite the ear as *roseō'la*, *rubeō'la*, *areō'lar*, *alveō'lar*. *Febric'ula* becomes *febricu'la*; *epu'lis*, *e'pulis*; *horde'olum*, *hordeo'lum*. It may be claimed, and with some justice, that it makes little difference what the disease, or the drug exhibited, is called, if only the patient is cured. Certainly an *en'ema* will provoke stools equally copious if miscalled an *enē'ma*; the *umbili'cus* is no more likely to become the seat of *hernia* for being mispronounced *umbil'icus*; *diabetes melli'tus* will no doubt exhibit sugar in the urine just as certainly if called *mel'litus*; *albu'men* will be found in the urine of Bright's disease neither more nor less if it is called *al'bumen*; the *abdō'men* does not retract if called *ab'domen*; the *massē'ter* muscles do not refuse to masticate our food when called *mas'seter*; nor does the grim *cadā'ver* rise up in wrath to resent the ignominious title of *cadāv'er*. What difference then does the mere matter of pronunciation make? Certainly it serves to distinguish the learned from the unlettered, the educated man from the clown. When we hear the uneducated complain of "rheumatiz," "noorolergy" or "janders;" of "a catarrhical condition of the head," of "diarrhee," "dyspepshy" or "ulsters on the legs," it excites no astonishment; at most it provokes a smile and argues them unlearned. But greater accuracy is reasonably expected of members of a learned profession. A distinguished professor may use "*labium majorum*," instead of *labium majus*, as the singular number of *labia majora*, and yet not excite those sensitive parts; or speak of the

"cachexia" (ch as in chair) which renders the patient liable to a given affection, and not bring on the disease. A physician may recommend that the man dying of suspected violence should make an "anti-mortem" statement with strong probability that whatever statement the man may make, he would gladly make to that effect, and yet the grim Knight of the scythe may not be provoked to unseemly haste in claiming his victim. Another may speak of micrococci and echinococci (-coc'sī) as "micro-cock-eye" and "echino-cock-eye," and these tiny forms of life will not resent the implied imperfection of their ocular apparatus.

He may even call the father of medicine "Hip-po-crates"—in three syllables, ignoring the e—and give no offense to us his unworthy children, whose regard for the paternal ancestor of our art may have become a trifle dulled by the lapse of years since the time when that venerable gentleman purged the ancient Greeks, and delivered their wives of babes destined to make the Grecian name and race illustrious through all time.

There is little doubt that ec/zema tests the skill of the dermatologist, quite as much when called eczē'ma; and he is entitled to equal credit for curing it under either name. Synechī'a taxes the resources of the oculist no less than when called synē'chia; nor is tinnī'tus aurium a more suggestive symptom to the aurist, or less annoying to the patient than when spoken of as tin'nitus aurium. Still if these diseases are ever cured it is because they are treated better than they are pronounced. Finally, a cicā'trix contracts as surely as a cicāt'rix; hamā'melis is just as inert as hamamē'lis; and verā'trum is no more active than verā'trum, or verāt'rum.

Let us glance for a moment at our drugs, and see what a woful medley their pronunciation presents. Quīnine' for example—a most valuable drug in its place—has not only suffered abuse in its administration, being prescribed to-day by intelligent physicians to fulfil every possible and impossible indication in almost every disease that human flesh is heir to, but insult has been added to injury by "calling it names." Webster will have

us call it *quĭn-ine'* or *quĭ'nine*; Worcester generously allows a choice of accent *quĭn-ine'* or *quĭn'ine*. Both agree on *quĭn-ine'*, surely sufficient authority to establish a pronunciation. It would seem that these three authorized pronunciations might give sufficient latitude for choice even to the most fastidious. But beside these we hear of "*quĭ-nĭne'*," "*quĭn'ĭne*," "*quin-ĭne'*," "*quĭ'nine*," and "*kineen*," and so on, to the verge of the impossible, and even beyond.

Our druggists have much to answer for in many ways; and in this matter of cacoëpy they stand preëminent as the champion cacoëpists. But while they fill our prescriptions with absolute accuracy, giving us what the prescription calls for—no more and no less—with drugs of good quality, we will overlook the stupendous perversity of the craft in calling gum tragacanth, gum "*trajacanth*," contrary to every principle of pronunciation in any tongue. We will ignore such mongrel terms as "*liquor (licker) ammoniæ acetă'tis*," and be silent when they speak of "*podoph'-ylline*," and "*copee'ba*." When they sell us "*veră'trum vi'ride*," we will not insist on either the English *veră'trum viride*, or the Continental *wă-ră'troom wee'ree-dă*, so long as the article is satisfactory in its action, but will allow them the privilege of mixing the two systems as they mix their drugs.

Nor would it be necessary to insist that every physician should pronounce *bubonocèle*, *cystocèle* and *hematocèle*, *bubon-ocĕ'le*, *cystocĕ'le*, *hematocĕ'le* with the added syllable as the Latin requires. They are Latin words to be sure, and no such English words are recognized by our lexicographers. Yet we have *bronchocele*, *hydrocele* and *varicocele* Anglicised, and may take the liberty of following analogy. Nor will we insist on *pletho'ra* or *trache'a*, as the Latin demands, since both are Anglicised—*pleth'ora* or *pletho'ra*, *tra'chea* or *trache'a*. We would not have our physicians become pedantic in this or in any direction; but there is ample room for reform far removed from suspicion of pedantry.

There now remains a large number of words essentially English in form, whose pronunciation is often incorrect. A few of

these—and only such as are common medical terms—are added. The first pronunciation given being the correct one, the second the common error :

apparā'tus	apparā'tus	gā'seous (gaz)	gās'eous (gas)
cer'vical	cervi'cal	lethar'gic	leth'argic
adult'	ad'ult	sin'ew (you)	sin'ew(sin'oo)
af'ferent	affer'ent	hȳ'datid or	hydāt'id.
allop'athy	allopath'y		hȳd'atid
cav'ernous	cavern'ous	mōl'ecule	mō'lecule
edēm'atous	edē'matous	im'potent	impo'tent
pari'etal	pariē'tal	ephēm'eral	ephē'meral
afflā'tus	afflā'tus	calor'ic	cāl'oric
canine'	cā'nine	obēs'ity	obē'sity
dys'entery(dis-)	dys'entery	erysip'elas	erysip'elas(ir)
	(diz)	ener'vate	en'ervate
cōch'ineal	cō'chineal	mēd'ullary	medul'lary
saline'	saline'	diphthē'ria(dif)	diphthēria
aryt'enoid	aryten'oid		(dip)
fē'brile or fēb'rile	fē'brile	syrup(sī'rup)	syr'up(sir'rup)
sē'nile	sēn'ile	jāl'ap	jāl'ap (jol)
accli'mate	ac'climate	morph'ine	morph-ine'
flac'cid (flack'sid)	flaccid	i'odine	i'odine
	(flas'sid)	brō'mide	brō'mide
mēt'ric	mē'tric	ox'ide	ox'ide,

and a large number of words, chiefly chemical terms, ending in -ine and -ide, in most of which the i is short, but may be long in some out of deference to long established custom. There is no authority for -ine.

Now is it not unworthy of men who are in some sense teachers of mankind, to be thus negligent and indifferent in regard to the pronunciation of the technology of their profession? It may be said that this is a trifle. The story is told of Michael Angelo that a friend visited him when he was finishing a statue. Some time after he came again and found the sculptor still at the work. Reproached for his apparent idleness the sculptor

exclaimed, "Not so, I have retouched this part and polished that; softened this feature and brought out that muscle. I have given this lip more expression, and that limb more energy." "Well, these are but trifles after all," said the friend. "Possibly," replied Angelo, "but remember that trifles make perfection, and perfection is no trifle."

But this is no trifle. As a profession we depart widely from rules of orthoëpy in our nomenclature; and for an educated man, a member of a learned profession, to make the blunders we have pointed out, is infinitely worse than for the uneducated to say "noorolergy," "rheumatiz," or "diarrhee." The fact is, our teachers in medical colleges are in a great measure responsible. We take our pronunciation from them unquestioningly, as we too often receive their other teachings. The remedy is evident. Care on the part of instructors to teach nothing wrong, even in pronunciation, and a spirit of investigation in the student, which will lead him to accept nothing merely because his professor tells him so, but to look into all matters for himself, and follow none but reliable and established authorities.

PROLAPSUS OF THE OVARIES.*

BY DARWIN COLVIN, M. D., OF CLYDE, N. Y.

THE following case came under my notice on the 8th of July last, and has been attended with much professional interest. Mrs. B., a widow, aged 29 years, while walking in the street, was suddenly seized with excruciating pain.

When I saw her she referred her suffering to the inguinal region and the anterior aspect of the thigh, in the track of the anterior crural nerve, and attended by a sense of fainting. She was pale, with a feeble and preternaturally slow pulse. In obtaining a history of her complaints, I learned that for two years past she had at times, more or less pain attending locomotion. At other times, when her bowels were unusually constipated,

* Read before the Central New York Medical Association.

she would have a throbbing sensation, sometimes amounting to severe pain during defecation. At another time, the pain would shoot out from the groin in various directions. Accompanying the symptoms was great depression of spirits, allied to hypochondria.

She had been married three years, yet never pregnant, the above symptoms supervening upon her married life. She suffered also from dysmenorrhœa, her menstrual periods lasting about a week. Upon examination I found the uterus much displaced downwards; to the left of the cervix my finger came in contact with a small tumor, exceedingly tender, and when pressed upon, exquisitely painful. In more fully examining the tumor, it immediately slipped from under the finger, when the patient shrieked. I could not distinctly outline the other ovary, it not having, as Prof. Goodell so intelligently describes it, yet been "pinched."

Although I had been treating her for symptoms simulating uterine neuralgia, yet her complaints were never of that character which seemed imperatively to demand a vaginal examination. Perhaps I came too readily to that conclusion; yet, when from necessity, symptoms referable to the sexual organs were spoken of, an excessive modesty and shyness on her part seemed to repel any earnest effort in that direction. Without a complete evacuation of the rectum once in twenty-four hours, she would, after from thirty to thirty-six hours, begin to complain of severe neuralgic pain in the groin and down the genito-crural nerve. Still, there had never been any complaint of pain in locomotion, nor sudden seizures of the same.

As to the causes of the displacements of these organs and the treatment, I can offer nothing original with myself, and, with one or two exceptions, I can find but little literature on the subject. Lawson Tait says, "the ovaries are liable to certain displacements which may give rise to many disagreeable symptoms without any actual disease of the glands. Thus one or both ovaries may, by a relaxation of their peritoneal investments,

drop into the retro-uterine cul-de-sac, and there be a source of great trouble.

This will be especially the case, if, at the same time, there is retroflexion or retroversion of the uterus, for I have known such a displacement of an ovary utterly to prevent the application of an apparatus for the replacement of the uterus, and cause so much suffering as almost to make us discuss the question of ovariectomy.

In such displacements, pressure on the gland gives rise to the same sickness and faintness as pressure on the testicle produces in the male, and the passage of a hard motion will give rise sometimes to most alarming symptoms.

He says nothing further relative to the form of displacement under consideration.

It seems to have been left for Prof. Goodell, in a clinical lecture, to place the profession under lasting obligations so far as the etiology and treatment of this unique displacement is concerned.

He says, "any cause tending to a lasting congestion of the reproductive apparatus, is very likely to lead to a prolapse of the ovaries. A torn cervix, an arrest of involution after labor, any backward displacement of the womb, you may find it in barren women. The reason is this: In sterile women the lack of pregnancy and suckling prevents that much needed break in the constantly recurring catamenia, and the physiological congestions of the womb augmented by the sexual congestions, are, by ceaseless repetition, liable to become pathological."

Perverted sexual relations, and perverted sexual excitations, are by no means rare causes of this trouble.

For instance, I have repeatedly discovered the ovaries low down in women who were shirking maternity.

Here an over-stimulation of the whole reproductive apparatus is kept up both by the enforced sterility, and by some of the preventive measures employed, which awaken the sexual instinct without appeasing it. So repeated erectility from self-

abuse, by ending in a passive congestion of the womb and of the ovaries, tends to these dislocations.

I have seen several cases of prolapse of the ovaries from this cause.

It is unnecessary to further enlarge upon the causes of this difficulty.

Undoubtedly the usual symptoms of this displacement are, first: Pain in locomotion, as the ovary now lies between the womb and the sacrum, it gets pinched between them at every step.

Second: A throbbing pain while the rectum is loaded, increased during the act of defecation.

Third: Paroxysms of pain shooting out from the groin.

Fourth: Mental despondency.

Prof. Goodell gives another symptom attending the dislocation, to wit: painful coition.

The indications for treatment would seem to be whatever will have a tendency to lessen the engorgement of the reproductive organs.

The treatment recommended by him is brom. potassium grs. xxx. tinct. digitalis gtt. x. three times a day in a table-spoonful of the comp. infusion of gentian; after two weeks, alternatives as the corros. chlo. of mercury, are usually necessary.

One of the most, if not the most important agent for the purpose of keeping up the ovaries, and one which I made use of in this case, is the knee-breast posture devised by Dr. Campbell of Georgia. As Prof. Goodell recommends it to be more thoroughly carried out than I did (not having then seen his paper), I will give his instructions verbatim:

“Two or three times a day, or more frequently, if needful, the patient should unhook her dress, loosen her under-clothing and kneel on her bed. Her body is then bent forward until the breast is brought down to the surface of the bed, while her head is turned to one side and supported in the palm of her left hand. Her knees should be about ten inches apart, and the thighs perpendicular to the bed.

"If she now refrains from straining, and breathes naturally, a reversal of gravity will be established.

"With the fingers of her free hand, she will next open her vulva. Air will rush in, and the abdomen and its contents will at once sag down. This will, of course, draw up the womb and the displaced ovaries out of the pelvic canal. As it is rather awkward for a woman, while in this posture, to free one hand and reach the vulva, Dr. Campbell advises that, previously to taking this attitude, she should insert into the vagina a small glass tube, open at both ends, and long enough to project externally. This will leave an air-way and dispense with the use of the fingers. A good substitute will be found in the empty barrel of the old-fashioned cylindrical "female syringe," as it is called.

"After staying in this posture for a few minutes, the woman will remove the tube, and slowly turn over on her side, where she will lie as long as she can. Such constant replacements are of great service, for they lessen the throbbing; they give the limp ligaments a chance of shrinking, and they teach the ovaries good habits of staying at home."

The course pursued with my patient was, with perhaps the exception of the knee-breast position, one which would readily suggest itself to any practitioner, varying the specific agents as circumstances might seem to require. I only directed the knee-breast posture to be observed once daily, and that upon retiring, with directions that she occupy, at *all times*, a bed, the foot of which should be elevated eight inches; also, that she observe the recumbent position as much as was convenient. I am now well convinced that had I required the observance of the knee-breast position twice or thrice daily, my case would have improved more rapidly, as her condition was approaching anæmia.

As it was, her general health was materially tonified, and the position of the misplaced ovary was very much improved on the 20th of August, when she was about to make a necessary though temporary change of residence.

"TONIC TREATMENT" OF SYPHILIS.*

BY P. W. VAN PEYMA, M. D.

THE purpose of this paper is to direct attention to the so-called "Tonic Treatment of Syphilis," as advanced more particularly by Keyes, of New York, which, since the time of its introduction to the general notice of the profession, has received the approval of many medical men of high standing. It is not, therefore, my intention to review the history of the treatment of syphilis. This has undergone many radical changes since the time that this disease first attracted general attention, some centuries ago. The pendulum has swung from one extreme to the other, and back again a number of times; especially is this true in regard to the employment of mercury as a curative agent—many times denounced as entirely wanting in usefulness and even as terrible in its evil effects, and again extolled as a specific as valuable as it is harmless. I shall confine myself to a review of the points brought forward by Keyes, in a little work entitled "The Tonic Treatment of Syphilis."

Keyes in this preface of the work introduces the subject as follows :

"My studies in syphilitic blood have yielded results at once so gratifying to me, and so convincing as to the tonic influence of minute doses of mercury, that I feel impelled to lay this brief treatise before the medical public in support of a continuous treatment of syphilis by small (tonic) doses of mercury." Then again in the first chapter he says, "a rational treatment of syphilis must rest upon a surer foundation than the mere statement of its value made by him who employs it. Such a statement has been made again and again, by different people employing the most varied means against the same evil, and, with apparent justification, for it is well known that a majority of the most visible lesions of syphilis (the contaneous efflorescences) tend to subside spontaneously, and thus, as Fournier happily expressed it, "to afford a triumph to every mode of treatment."

* Read before the Buffalo Medical Club, Sept. 3d, 1879.

After reviewing the various modes of treatment, he proceeds to the subject proper—the treatment of syphilis by small doses of mercury long continued. After quoting a number of authorities tending to show that mercury has frequently been considered a tonic in the treatment of chronic diseases generally, he adduces his principal proof of its tonic effect by what is really to be considered as a scientific demonstration. As a result of numerous microscopical examinations of blood, syphilitic and healthy, and as modified by the taking of mercury in large and small doses, Keyes and a number of others have proved that, first, syphilitic blood contains far less red blood corpuscles than healthy blood; second, that small doses, say one or two centigrammes of the protoiodide thrice daily, increase the amount when the number is abnormally diminished as a result of the syphilitic poison or otherwise; and thirdly, that large doses have the opposite effect, diminishing the number materially. These facts he determines by means of a hemati-metre, which is simply an arrangement for dividing the field of the microscope into numerous small spaces, thus facilitating the counting of the blood corpuscles. The blood is diluted according to a definite proportion. This is done by means of a fluid obtained from human urine, prepared as follows: “Take of urine, neutral or slightly alkaline, sp. gr. 1020, a sufficient quantity, filtered, add gr. v of cor. sub. in powder for each ounce of urine.

“This will throw down dense clouds of amorphous urates, so fine that ordinary filter paper will not remove them. After standing, the urates deposit, and the clear fluid above may be easily decanted. Reduce with water sp. gr. 1020. The result is a limpid sparkling acid fluid which remains clear, no matter how often contaminated with the pipette, and does not seem to allow the growth of any form of vegetation. It makes a perfect mixture with blood.” (See page 24 and 25).

The plan of treatment is then to commence with a small dose, say one centigramme, three times a day, continue this three days,

then increase one centigramme, given two or three times daily for about the same length of time. This rate of increase is continued until its effect on the gums begins to show itself; we have then reached the full dose, so called, which varies considerably in different persons. Half of this dose, called the tonic dose, is then given for a period of three years. The most convenient mode of administration is by means of centigramme granules, taking one, two or three, or more, as the case may be. During the course of treatment should there be an outbreak of symptoms, it is advised, either to increase at once to the full dose, or what is probably preferable, supplement the tonic dose with inunctions or fumigations. As to the period of commencing treatment it is recommended to begin as soon as the diagnosis is positively established. This may not be perhaps until the rash or sore throat has manifested itself. That the diagnosis should be thus positively established is evident, as otherwise the patient might for the rest of his life-time be the subject of well grounded doubt and fear—a most unpleasant mental condition.

Under this treatment it is claimed that patients, with rare exceptions, will enjoy their usual health, and in some instances, profess to unusual freedom from aches and pains, and other morbid symptoms. The blood corpuscles increase in number rapidly, the previous pallor gives way to a healthy color, and life looks bright once more.

Under this treatment Dr. Keyes has failed to see any returning manifestations of disease in patients after ten years of uninterrupted health. These have married and have had healthy children to all appearances. This is the only medical treatment recommended, except that in certain cases a short course of iodide of potass. may sometimes be advisable. I may say here that during the last year I have treated half a dozen cases according to this plan and am very much pleased with the result. In two instances the patients have as yet had no secondary symptoms, with the exception of a very slight sore throat, and this after

more than eight times the usual period of incubation has gone by. They apparently enjoy perfect health. In the other instances the symptoms rapidly disappeared and there has been no return ; on the contrary, the patients appear strong and well.

In the *Maryland Medical Journal* for July, the leading article is one upon some observations on the treatment of syphilis, by J. Shelton Hill, M. D., read before the Baltimore Medical Association, in March, 1879. As a historical review of the past treatment of this disease, it is quite exhaustive, but it was written principally with a view to giving the author's opinion and conclusions regarding this particular plan of treatment.

His conclusions, based upon a considerable number of cases extending over years, is confirmatory of Dr. Keyes' observations.

His microscopical examinations of blood likewise agree with and confirm those of Dr. Keyes. If the conclusions arrived at by these observers became established we shall have additional testimony of the value of scientific experimentation in general and microscopical observation in particular.

In conclusion I wish to urge a fair trial of this method of treatment. If, as Dr. Keyes and others believe, that, by the long continued use of small doses of the protoiodide of mercury a complete eradication of the syphilitic poison may be effected, it is very important that the fact be generally known and acted upon. The method is simple, and judging from existing evidence, it promises much.

CLINICAL REPORTS.

GONORRHOËAL CONJUNCTIVITIS — RUPTURE OF CORNEA IN ONE EYE—USE OF TRANSPARENT SHIELD.

BY LUCIEN HOWE, M. D.

INFECTION of the conjunctiva from gonorrhœal virus is of such frequent occurrence, that any general remarks concerning the disease are necessarily trite and unimportant. In a certain case,

however, I have had occasion to make two observations which appear worthy of record, and in order to present these points clearly, it seems well to sketch the outline of the clinical history.

William H., a baker, 19 years old, came to me November 4, 1875, suffering from a severe conjunctivitis of the right eye. He frankly acknowledged the cause of contagion, and stated that his attention was first called to the difficulty in the eye about one week previously.

On examination the lids were found to be œdematous, and swollen to such a degree that no effort on his part would cause them to separate, while a copious discharge of thick and creamy pus continually oozed from between them. On forcibly opening the eye, the conjunctiva was seen to be intensely injected, and so infiltrated that the dull cornea appeared as if half buried. An opaque line extended across that portion, being particularly white and thick at one point, and obstructing the view of the structures beneath. Pain was constant and severe, and vision was already reduced to imperfect perception of light.

With such a condition of affairs, the loss of this eye, either wholly or in part, seemed inevitable, and special precautions were therefore directed to the other, in order, if possible, to protect it from the further contagion which so often results.

For this purpose a shield was fitted to the left, which not only prevented the access to it, of poison from the other side, but at the same time allowed it to be useful for seeing and to be under constant observation. This form of protective bandage was constructed as follows: A thin and clear piece of mica (such as can be found in any hardware store) was cut into a small parallelogram measuring about an inch and a half long by an inch wide. A strip of adhesive plaster was glued to each side of this central transparent window and by then properly bending these, adjusting the ends, and shaping the edges to the brow, cheek and nose, the whole was firmly attached to the parts surrounding the sound eye. Moreover, to guard against any possible openings, the edges and outside of the plaster, especially, where

adherent to the skin, were thickly coated with collodion. For reasons which will be mentioned, it was necessary to replace this shield by a similar one several times in the course of treatment, but it will readily be seen that complete and convenient protection was thus afforded to the endangered organ.

The other point in this case which seemed worthy to be noted was the manner of perforation of the corneal ulcer—a process which frequently occurs, but which can seldom be observed. The formation of such an ulcer was apparent from the opacity in the cornea seen at the first examination, and this rapidly increased in size and depth. A strong solution of atropia was of course used frequently, and other attempts made to lessen the corneal inflammation. The conjunctiva was cleansed as frequently and thoroughly as possible, a mild astringent applied occasionally, and once a day a solution of silver nitrate, ten grains to the ounce, was carefully brushed over the inner surface of the lids, being neutralized immediately with salt water.

It was after such an application as this that perforation of the cornea occurred. Special pains had been taken to have the silver solution touch only the inflamed conjunctiva, but a few minutes afterward, when the patient attempted to look upward, suddenly a jet of aqueous humor spurted through the cornea, several inches in front of the face, and great pain was felt in the top and back part of the head.

On examining the eye, the anterior chamber was found to be empty, with iris and lens closely pressed against the cornea; subsequently an extensive leucoma was formed, with the iris adherent to it, a condition which rendered the eye practically useless, although its natural form was retained.

Such are the facts pertaining to these two phases of the case. Let us now consider their practical bearings a little more in detail.

First, as to the protective bandage. That some such precaution is necessary, there seems to be but little doubt among writers, or in the minds of those who have been unfortunate enough to treat many cases of this kind.

Snellen proposed several years ago, that the eye still remaining unaffected, should be covered with a glass coating, but the form here mentioned, seems to be much more simple and convenient than that, and quite as effective as the one described by Graefe or any other.

It is true the frequent bathing of the diseased eye will loosen the adhesive plaster about the nose, and tend to give entrance to the virus unless occasionally renewed.

Moreover, moisture will condense on the inner surface of the mica, not only obscuring the vision in part, but producing a slight degree of conjunctivitis. But these objections are of slight importance compared with the gain, and on the whole this form of the protective bandage would seem to be readily applicable to a large class of cases.

Again, as to the manner and cause of the perforating ulcer. In Zehender's *Augenheilkunde* (page 189), a case is mentioned in which the same accident occurred quite as suddenly as in the one cited. In that instance he thinks the perforation was produced by forcible contraction of the ocular muscles. It is possible that the same result was due to the same cause in the case which I saw, particularly as the patient was just then making an attempt to look upwards. It is but fair to think, however, that the unfortunate result was at least hastened by the use of the strong solution of silver nitrate.

The fact that such a caustic agent acting on the thin base of the ulcer would be apt to attenuate it still more, the fact that the contact of the solution with the ulcer might happen in spite of the greatest care, and the occurrence of the perforation immediately after the application, all tend to the inference that such might be the possible cause. The use of caustics or even astringents, is of course not indicated at certain stages of a conjunctivitis with a corneal ulcer as a complication, but in such a case, and applied in the manner indicated, there appears to be a large balance of opinion in its favor. I am inclined to think, however, that under circumstances of this sort, strong solutions

of any caustic should be used with much caution, if at all, and certainly not until the more acute symptoms have subsided.

FIBRO-CYSTIC UTERINE TUMOR; REMOVAL OF
TUMOR AND UTERUS. — BY PROF. JAMES P.
WHITE, M. D.

REPORTED BY WILLIAM D. GRANGER, M. D.

MRS. B., forty-five years old, was in rather feeble health; the tumor had a known history of about a year, and well filled the abdomen, the parietes being tightly stretched over the tumor. It was fluctuating and dull on percussion over the front surface, but tympanitic over the sides. The operation was performed October 6th, 1879. When placed upon the operating table, none of the physicians present doubted the existence of a cystic ovarian tumor. The usual exploratory incision was made, and the tumor exposed. Doubts now arising as to the character of the tumor, a trocar was introduced; no fluid except blood escaped. The trocar being withdrawn, a rapid hemorrhage followed, which was controlled by digital pressure on the wound; the incision was enlarged from the symphysis to above the umbilicus; the tumor was adherent by its upper and right sides; these adhesions were broken down by the operator and his assistant. At one time, when three hands were between the tumor, and the diaphragm, breaking down adhesions, respiration suddenly ceased for half a minute or more; when their hands were removed, respiration was assumed; the heart, however, continued regularly to pulsate; the tumor was covered by a growth of the peritoneal tissue of the uterus, which was opened, and the tumor easily stripped from its covering. It was found to be attached, without a pedicle, to the posterior surface of the uterus. It was removed from its attachment by enucleation. A profuse hemorrhage followed, which was stopped by compressing the abdominal aorta; the hemorrhage coming from the torn sur-

face as from a sponge, and not from any vessels which could be ligated, it was necessary to remove the uterus. Strong ligatures were applied around the cervix, and the uterus removed by the knife. With the uterus, was removed of course the ovaries and the serous sack of the tumor. The wound was closed by deep stitches, and a drainage tube inserted. With and following the last hemorrhage the pulse rose to 160-170, and was weak and fluttering. Subcutaneous injections of 3ii of whiskey, and 3i of ether in mx. xv doses, noticeably reduced and strengthened the pulse. The patient did not rally well after the operation. The stomach retained all food and medicine given, and there was never the slightest nausea, although so large a quantity of ether was administered. Whiskey, milk punch and beef tea were freely given; every four hours whiskey 3ii , beef tea 3ii , quinine gr. v were given by the rectum. At 4 P. M. the pulse was 130, temperature $98\frac{1}{2}$; the day following the operation at 9 A. M., pulse 150, temperature $98\frac{1}{2}$; during the day the pulse rose until it could not be counted, and the patient died thirty-two hours after the operation. This case is interesting, because illustrating a case of abdominal tumor, when the error of diagnosis could not have been foreseen. The removal of the tumor was justifiable, after its nature was known, because of its rapid growth and the correspondent failure of the health, so that the patient said her life was a burden to her. Death in this case is clearly to be attributed to that much abused cause, shock. It plainly was not due to inflammation, or any of the secondary results of inflammation.

Hemorrhage, which was perhaps an assisting element, was a minor one. Although a large quantity of alcohol was given—perhaps by rectum and stomach as much or more than 3xvi —it had almost no effect upon the pulse, or to rally the patient. And, although the patient was a weak woman and unaccustomed to stimulants, her mind, which was remarkably clear until her death, was unaffected by this large amount. It is an interesting question; what became of it? what force did it exert in the

economy? The tumor weighed eighteen pounds. After removal it still gave distinctly a sense of fluctuation, and was of a jelly-like consistency. It was fibro-cystic in structure. The cysts were from a very small size to that of an egg; in places the tumor was honey-combed with small cysts.

STRICTURA RECTI. LINEAR RECTOTOMY—CURE.

REPORTED BY HERMAN MYNTER, M. D.

MRS. S., forty years of age, consulted me in December, 1877. In 1871 she experienced difficulty in defecation; two years after a swelling, accompanied with great pain, came around the anus, resulting in suppuration and the formation of several fistulas, which have since continually kept open, other fistulas occasionally forming. The impediment to defecation increased steadily, and for four years an evacuation of the rectum has taken place only by the use of cathartics; at times complete occlusion would occur with great meteorismus, pain and vomiting, lasting for several days. Gradual dilatation with bougies has been resorted to, but with only temporary relief; no symptoms of syphilis were apparent; healthy children were borne; the husband had venereal disease which yielded to potass. iodid.

On examination the anus was almost encircled with fistulas, the skin and subcutaneous textures indurated; three-fourths of an inch above the anus, almost a perfect diaphragm of the rectum was discovered, with a small opening anteriorly near the vagina, through which a bougie, 26 millimetres in circumference, could be introduced; the stricture was hard as cartilage. A sound introduced through the fistula was felt under the mucous membrane, until it disappeared behind the stricture. The general health from constant anxiety, the frequently recurring rectal occlusions, and the strict dietary observed to avoid evacuation of the bowels, had become very much impaired.

Through the application of electrolysis for a period of three weeks, a knob 36 millimetres in circumference was passed with considerable ease through the stricture, the negative pole, a metallic electrode, being introduced into the stricture while the positive pole with a moistened sponge was applied to the sacrum; a current from ten or fifteen cells was used; the applications were so painful that at the end of the third week the treatment was omitted, although it had so far dilated the stricture that defecation was accomplished with greater ease and facility; large doses of potass. iodid were used.

In January, 1879, the patient consulted me again; her previous symptoms had returned with all their severity, and she expressed a willingness to submit to any operation to gain relief; the stricture had contracted so that a bougie of 18 millimetres in circumference only could be introduced; new fistulas had formed; increased amaciation was observed.

January 11, 1879. Operation under chloroform; Drs. Gay and Lothrop assisting. The sphincter ani was divided by means of a galvano-cautery battery, the loop being introduced through one of the fistulas and brought out through the anus. The index finger and several uterine dilators failed to dilate the stricture. Every attempt to carry the wire above the stricture—through the fistula—was unsuccessful; the stricture was at length incised with herniotome, and all the contracted tissues freely cut through until two fingers could be easily passed; the mucous membrane above the stricture was ulcerated. A plug saturated with carbolic acid and sweet oil (1 to 10) was applied, and the rectum syringed out with carbolized water; anodynes prescribed to relieve pain. Convalescence was rapid, the parts healing rapidly and in three weeks the patient was discharged; considerable power had been regained on the sphincter ani and two fingers could be readily introduced. A large rectal bougie has since been used daily, the fistulas have healed, the general health improved, and evacuations of the rectum take place without pain and with comparative ease. No further contraction has since taken place.

TRANSLATIONS.

EXTIRPATION OF THE KIDNEY.

FROM THE GERMAN BY HERMAN MYNTER, M. D.

PROFESSOR CYERNY, of Heidelberg, says, in *Centralblatt fuer Chirurgie*, that although ten years have elapsed since the first extirpation of the kidney by the celebrated Simon, we must acknowledge that the last year has done much to secure the triumph of this serious operation. The methodical use of the antiseptic treatment in ovariectomy, the antiseptic ligature and the intraperitoneal treatment of the pedicle, first made it possible for Dr. Martin, Jr., to obtain new successes in cases of movable kidneys. These operations, therefore, mark a new era in nephrotomy, because the way has been chosen through the abdominal cavity for the extirpation of the kidney. The question is no longer as to the propriety of the extirpation of the kidney, but which way is preferable, the extraperitoneal from the lumbar region, or the intraperitoneal from the linea alba. As both ways have been successful, we must determine in which case we shall choose the one, and in which the other. Martin has lately extirpated a tumor of the kidney through laparotomy with success, while Zweitel extirpated a healthy kidney with success after Simon's method, on account of a fistula between the ureter and the uterus. Czerny has tried nephrotomy twice, once without success through laparotomy on account of a large carcinoma of the kidney, the other time from the lumbar region on account of pyonephrosis, and this was successful. The patient was a married woman, thirty-two years of age, who, for four years had experienced difficulty in urinating, until in April, 1879, an abscess formed below the right eleventh rib. The abscess was opened, and the secretion of matter was alternately more or less copious. The patient declared that, when the matter flowed freely from the fistula the urine was clear, while it became thick and purulent, and attended with great pain and fever, when for a

while the fistula did not secrete anything. We were able to convince ourselves of this fact at the clinic. I diagnosticated a pyonephrosis with perinephritic suppuration on the right side, secondary catarrh at the bladder, and healthy left kidney. I tried first by dilatation of the fistula to provide for a better discharge of the matter, but held out the prospect of extirpation of the kidney, if the organ was diffusely diseased. After having, on the 22d of May, 1879, dilated the fistula in layers in the direction of the eleventh rib, and toward the middle of the crest of the ilium, my finger entered a suppurating cavity, in which I found a soft lobular tumor, which felt like placental tissue. As there occurred a copious venous bleeding, I dilated in the direction mentioned, and resected subperiostally a piece of the eleventh rib. I obtained so much space by that, that I could see how the kidney, enlarged to three times its size, was surrounded by copious old coagulas of blood. These were removed, and the posterior and lower part of the kidney loosened. As there was not sufficient space upwards, I was obliged to remove a farther piece of the eleventh rib (in all nine centimeters). I now inserted my whole hand in the wound, and loosened the upper part of the kidney, by which proceeding a large amount of matter was discharged. The pedicle was ligated with silk ligatures and elastic ligatures, the rest of the kidney was cut off except a piece of the hilus, and the ligatures brought out through the wound. The wound was disinfected with a solution of chloride of zinc (5 per cent.) and plugged with thymol-gauze, and half of the incision (20 centimeters long) sewed together. Scarcely any fever occurred. On the 14th of June the necrotic pedicle and the ligatures came away. On the 16th of June the patient got up, but was not discharged until July 3d, as the wound closed very slowly. Sept. 14th, there was still a slight discharge from the wound, but the patient feels perfectly well, and is said to be pregnant. I have no doubt that both methods of nephrotomy, the extraperitoneal and the intraperitoneal, are justifiable. I farther believe that the extraperitoneal method, *ceteris paribus*, is

the less serious. If the kidney is not too much enlarged and fixed, the lumbar nephrotomy is preferable. For movable kidney on the other side laparotomy ought to be chosen. Whether laparotomy may also be of use in fixed tumors of the kidney, which are too large for the lumbar operation, will be learned by bold trials in such cases in the future. I believe I have enlarged the field for the lumbar operation by making the incision of Simon farther forward, at the anterior margin of the quadratus lumborum muscle, and by combining it with the partial resection of the eleventh rib. The whole hand may then be introduced with ease into the wound, and the loosening of the kidney and the ligature of the pedicle may be accomplished with greater facility. The resection of the rib is without danger, because the outer third of the eleventh rib has no connection with the pleural cavity.

SELECTIONS.

REMOVAL OF A LARGE FIBRO-SARCOMA OF THE UTERUS BY ABDOMINAL SECTION UNDER LISTER'S METHOD, WITH SUCCESSFUL RESULT.

BY L. C. LANE, M. D., PROF. OF SURGERY MEDICAL COLLEGE OF THE PACIFIC.

IN the *Pacific Medical and Surgical Journal* for August, a case of this nature is reported by F. H. Dennis, M. D., of San Francisco.

The patient, the wife of the physician reporting the case, had reached the age of 35; the tumor was first noticed fifteen years previously—the patient then being 20 years of age, and having menstruated regularly about a year. She enjoyed perfect health until within a short time preceding the time of operation. The writer proceeds to say: "As her health was good, no thought of an operation was entertained by any one, but on the

contrary all opposed it, notwithstanding which, she anxiously wished to be relieved of the tumor on account of her enormous size and the menorrhagia. About the 15th of April her health began to fail. She commenced to fall away in flesh; her appetite, which had always been remarkably good, became impaired; œdema of the extremities was very extreme, owing to pressure on the femoral veins; altogether she failed very rapidly. The pressure was more on the left side, the larger portion of the tumor being on that side. Her left leg was simply enormous in size. For several days before the operation she could not walk across the room, and her pain was beyond endurance; gangrene of the leg would have been the inevitable result within a few days." The operation being decided upon, it was performed May 27th, as follows: "The usual preparations were made, such as giving an enema twelve hours before; no breakfast being allowed in the morning. Several gallons of previously boiled water were in readiness, with which to make the carbolic water. One, strength of five per cent. carbolic acid was prepared for the spray, and one of two and one-half per cent. for sponges, ligatures and instruments, and a furnace with heated irons in readiness to be used for cauterizing, if found necessary. The steam spray was made ready with its five per cent. solution, and other necessary preparations having been made, she was brought in and placed on the operating table. Dr. Lane assisted by Drs. J. H. Wythe, Burgess, Sims, Plummer, J. Regensburger, M. Regensburger, Perry, Jos. Haine and myself, commenced the operation. The anæsthetic having been administered, an incision commencing four inches above and to the left of the umbilicus in the linea alba, and extending nine inches down and terminating over the fundus of the bladder, was made under a full spray of carbolic acid solution. On dividing the peritoneum, the tumor a large nodulated, interstitial uterine fibro-sarcoma, came directly into view. The abdominal walls being held apart by broad-bladed retractors in the hands of an assistant, it was then lifted partly out of the cavity. There were found adhesions an-

teriorly to the fundus of the bladder, and great difficulty was had in detaching or dissecting it away, so closely was it adherent. To avoid puncturing the bladder, a curved catheter was introduced and kept in constant motion, moving it from side to side to act as a guide for the dissection. The tumor was also found adherent laterally and posteriorly, and there likewise was with difficulty detached, owing to the close proximity of the internal iliac artery and vein; the superficies of the attachment being equal to a space ten inches in length by six inches in breadth. The intestines with the omentum were carefully wrapped in Lister's carbolized gauze, and held to one side in order to avoid wounding them, the spray falling all the while in a steady "mist" into the abdominal cavity. A stout curved needle, armed with a strong carbolized double silk ligature, was made to transfix the uterus through the cervix about one inch above the os. Each half was then firmly tied, including the uterine artery and vein, after dividing the ovarian and branches of the uterine artery, in the broad and round ligaments, one-half of the main ligature gave way, and some little difficulty was had in arresting hemorrhage. It was finally, however, held in check with an ovariectomy clamp, until the ligature was again tied lower down. It was very fortunate that the accident occurred when it did, for had it happened after the wound was closed she might have bled to death before it could have been gotten at to tie.

After all the bleeding was arrested, the whole tumor, including the uterus, ovaries and fallopian tubes, was divided and removed *all together*. The end of each (half) ligature was then attached to a silver wire and brought down through the cervix and also into the vagina, thus establishing through the course of the ligature a *drainage*; all oozing having ceased, the cavity was thoroughly cleansed, the intestines with the omentum carefully replaced, a glass drainage tube (as a precaution) placed in the lower part of the abdominal wound, and the wound then brought *evenly* together and secured with long steel needles, the peri-

toneum included. The cutaneous surfaces were brought together and secured by interrupted silver wire sutures.

The tumor was found on examination to measure twenty-eight inches in circumference, twelve inches in length and ten inches in diameter, and weighed twenty pounds. She weighed a few weeks before the operation, one hundred and sixty-five pounds; six weeks after, one hundred and twenty-seven pounds. The cautery was not used, happily there being no necessity for it. The wound was then dressed according to Lister's antiseptic method, and the patient removed to bed. The operation lasted two hours and twenty minutes. Bottles of hot water were then applied to her feet, and on each side until she became warm. There was comparatively little shock, the loss of blood being very small in amount. On her removal to bed she was given brandy until she had thoroughly reacted, after which one-fourth grain morphia was given by hypodermic injection.

About one o'clock at night she commenced to vomit, and continued to do so for twenty-four hours almost incessantly. Everything taken she would throw up instantly, at each time vomiting almost *pure bile*. This bilious vomiting I noted as a very unfavorable symptom. Different remedies were tried, such as lime water and milk, hydrarg. sub. mur. in one-half grain doses every half hour, oxalate of cerium, etc., all without any effect; I finally concluded to give *nothing at all* by the mouth, resorting to ice-cold applications to the face, head and chest, also a spray of cologne which was very refreshing, her fever at the time running pretty high. In this manner I succeeded in checking the vomiting, afterwards having no further trouble.

On the morning of the 28th of May the dressings were removed by Dr. M. Regensburger, who had charge of the Lister arrangements. The wound looked well, a slight serous discharge flowing from the drainage tube. The discharge from the uterine wound was greater, and of a sanquino-serous character. There was very little tympanites, and her condition was good. Beef tea and champagne (iced) were given during the following

forty-five hours. The abdominal wound was dressed every twenty-four hours, under full spray of carbolic acid (five per cent. solution). The wound was by this time suppurating very freely. The vaginal wound also discharged freely a thick, dark colored and highly offensive pus. This was injected every three hours with two and one-half per cent. solution carbolic acid. No symptoms of peritonitis occurred. Pulse 120, temperature 102° Fahr.

On the morning of the fourth day she asked to read the morning paper. I will not go into a detailed account of every day's treatment, the symptoms, pulse, temperature, etc., according to my notes, as it will consume unnecessary time and space. Suffice it to say, at no time did her temperature go beyond 103°, or her pulse higher than 130. I may remark here, that for several weeks before the operation (after she began to break down) her pulse ranged as high as 130, and respiration was very much embarrassed. I regret that I did not take her temperature or note her respirations exactly. The average temperature after the operation was about 101½°, pulse 120. Her diet was light and nutritious. About the fifteenth of June her condition was so good that I neglected to take any further notes of the case, she having only the usual amount of traumatic and suppurative fever. What is very remarkable, she has not suffered any pain from either of her wounds since the operation, whereas, before, her suffering was excruciating, it being necessary to keep her under the influence of morphia all the time for several days before the operation.

I omitted to say the drainage tube, together with the sutures, were removed on the fourth of June. There was no discharge through the tube at all, the drainage being through the vaginal ligatures, or rather the uterine ligatures, the suppuration being very free through this wound. Injections of two and one-half per cent. solution carbolic acid were used three times a day. Tonics of dialyzed iron, calisaya bark elixir, malt extracts, etc., were given three times a day.

July 1. Out of bed, walking about the room *convalescent*; abdominal wound entirely healed; uterine wound still discharging, though not copiously.

July 7. The right half of ligature (uterine) becoming loose, was removed by Dr. Lane; the left still remaining.

July 20. She is now *entirely well*.

* * * Note. The five per cent. solution used in the spray was really about two and one-half per cent., as in mixing with the hot steam from the atomizer it was diluted to that degree of strength.

ATROPIA IN TRAUMATIC TETANUS.

SURGEON D. H. CULLIMORE, F. R. C. S. L., &c., in the *London Lancet* for December, gives the following deductions from a case of Traumatic Tetanus under his observations at Rangoon, Burmah, in April, 1875, which yielded to the subcutaneous administration of atropia in $\frac{1}{40}$ to $\frac{1}{80}$ grain doses, every 5 to 8 hours.

1. That tetanus, which is a series of reflex phenomena, depending upon an over-excited or congested state of the brain, the spinal cord and their membranes, is capable of being relieved or even cured by atropia, when administered in comparatively small doses, extended over a certain period of time, according to the severity of the symptoms, though we know from the experience and experiments of Drs. Harley, Frazer and others, that when given to its full physiological effect, it produces excitement and congestion of the cord, followed by the usual reflex results, as jactitation, muscular spasm and convulsive fits.

2. That the administration of the medicine was not followed by any of the easily recognizable symptoms of the drug (two grains of which has caused the death of a healthy adult when given in one dose) proving both the tolerance induced by the disease, and, perhaps, also illustrating the homœopathic theory or formula *sine* the infinitesimal system of dosage.

3. That amputation of the injured part, recommended so strongly by Larrey and others, even after the supervention of tetanus, though it may perhaps help to lessen the severity of the disease, does not act as a prophylactic, and should, I think, never be had recourse to after the symptoms have declared themselves. It would be then injurious, for the peripheral irritation would have become central and independently dynamic. For the same reason the division of nerves should not be resorted to. In two cases where I examined the nerves after death, I failed to perceive that they differed in any way from those of the opposite side. In one of these there was slight congestion of the membranes and a softening of the cord in the lumbar region, and in the other, a peculiar cloudiness of the cord, which may, however, have been due to post mortem changes. Yet it is certain that there is some lesion, though in every case, we may not be able to perceive it. This lesion should be looked for in that portion of the spinal cord with which the nerves from the affected part first communicate.

4. If the line of treatment adopted in this case should be found beneficial in others of the same disease, I would suggest that it might be extended, with such modifications as may be necessary to the treatment of allied diseases, as epilepsy, puerperal convulsions, and hydrophobia.

OSTEO-MYELITIS OF THE LONG BONES.

DR. N. SENN, of Milwaukee, in an able article on spontaneous osteo-myelitis, published in the January number of the *Chicago Medical Journal and Examiner*, reaches the following conclusions:

1. Spontaneous osteo-myelitis is an infectious disease.
2. It is most prevalent in damp, changeable climates, and during the winter and spring months.
3. It affects with preference individuals during the period of growth and development of bone.

4. Traumatism and other agencies which produce a retardation or arrest of circulation in the vessels of the marrow act only as determining causes.

5. The primary seat is usually in the marrow of the cancellated tissue, in close proximity to the epiphysary cartilage.

6. Joint affections are frequent and prominent complications of this disease.

7. Thrombosis and inflammation of the veins of the marrow, bone, periosteum and soft parts are of frequent occurrence, and are the direct cause of pyæmia.

8. Swelling is absent for the first few days, and when it does occur, it becomes rapidly diffuse, and is attended by œdema and enlargement of the superficial veins.

9. Fluctuation is diffuse as soon as its existence can be ascertained.

10. A constant high temperature and typhoid symptoms indicate the gravest type of the disease.

11. Death may result from the intensity of the primary infection, but is usually produced by some complication.

12. Early removal of the products of inflammation under strictest antiseptic precautions, and local disinfection of the tissues are of paramount importance for its successful treatment.

13. Epiphyseolysis may become completely repaired.

14. Excision of shaft may become necessary, during the acute stage, to prevent exhaustion, from profuse suppuration; this rule is not applicable if the humerus or femur is affected, on account of the impossibility of keeping the limb in position until regeneration of the bone has taken place.

15. In most cases, fixation of the limb is necessary for the purpose of procuring rest and to prevent deformity.

THE SETON IN CHRONIC PATELLAR BURSITIS.

In the *London Lancet* for December, Dr. Austin recommends the following as a certain method for the cure of chronic housemaid's knee: The seton, composed of a double silk thread,

moistened in weak carbolic acid, is conveniently passed through the same canula which draws off the fluid, and in certain circumstances, when the avoidance of pain is urgently required, the ether spray will be found a great boon. Too small a trocar is not to be selected, or the apertures will be apt to close up and obstruct the discharges. To have to enlarge them afterwards would be exceedingly disagreeable. A pad of lint, moistened also with carbolic oil, covered with gutta-percha tissue, and the whole covered by a few turns of a bandage, is both agreeable to the patient, and helps to maintain the patency of the apertures. The seton should be drawn every morning, in order to present a fresh portion of it each time to the suppurating interior, and the pus encouraged to ooze out by frequent and gentle pressure of the fingers. In five or six days, the seton may be withdrawn, and after five or six days more of rest, the patient may be allowed to walk about. Should any congestion or weakness be left behind, it is effectually removed by the local use of the cold douche. Iodine, blistering, pressure, and even simple cupping, are very uncertain remedies.

IODIDE OF STARCH.

As a general antidote in poisoning, Dr. Bellini, in a paper read before the Medical Society of Florence, recommends the iodide of starch as an antidote to poison generally. It is free from any disagreeable taste, and has not the irritating properties of iodine, so that it can be administered in large doses.

He has made numerous experiments, and states as a result of these, that at the temperature of the stomach and in the presence of the gastric juice the iodide combines with many of the poisons, forming in some cases insoluble compounds, in others soluble compounds, which are harmless, so long as they are not in too large quantities. He recommends it as safe in all cases where the nature of the poison is unknown, and as especially efficient in cases of poisoning by the alkaloids and alkaline sulphides, by caustic alkalies, by ammonia and especially by those

alkaloids with which iodide forms insoluble compounds. In cases of poisoning by salts of lead and mercury, it aids the elimination of these compounds. In cases of acute poisoning, an emetic should be employed soon after the administration.

HOW TO GARGLE THE NASO-PHARYNX.

WHEN the gargle is designed to reach the naso-pharynx, Dr. Löwenburg recommends the following method:

The patient inclines the head horizontally backward, and performs movements which we may call "quasi-deglutition," not including the last portion of this physiological action, definite swallowing. The liquid is passed much higher behind the soft palate than the ordinary method of gargling will permit; some persons succeed so well in this manœuvre that they are able to reject by the nose the liquid which has been received by the mouth. Moreover, these rapid muscular contractions completely detach the abnormal secretions, which can then be easily expelled, and the greatest possible relief is thus given to the patient.

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, January 6, 1879.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

MEMBERS present, Drs. Fowler, Wyckoff, Cronyn, Gould, Mynter, Moody, Gay, Trowbridge, Keene, Bartlett and Hartwig.

Dr. C. C. F. Gay read an interesting paper on "Refracture for the Correction of Deformity." The reasons for the procedure were given in detail, the method described, and cases cited in which its employment had proved beneficial.

In the discussion which followed, Dr. Mynter spoke favorably of refracture, though he differed with Dr. Gay as to the universality of its application.

Dr. Cronyn thought it would be much better if injuries were so treated in the first place, as to result in slight deformity. He feared that serious harm might often result to contiguous vessels and nerves by the act of refracture, and thought that if any operative interference was to be employed, it should be an osteotomy with Lister's antiseptic precautions.

Dr. Bartlett objected to refracture, because in the majority of cases it was necessary to keep the patient in bed afterwards, and this prolonged confinement, he thought, was sometimes permanently detrimental.

Dr. Hartwig considered osteotomy preferable to refracture, especially if the antiseptic method was used.

Dr. Gay, in reply to these objections said, that according to his experience refracture was not attended by danger to the limb, nor by pain and injury to the health of the patient; indeed, so little contusion was produced, and it was followed by such slight pain or inflammatory symptoms of any kind, that for this reason especially, did he prefer it to any other method.

Among the prevailing diseases, scarlatina and rubeola were reported as particularly frequent, and cases were mentioned by Drs. Cronyn and Bartlett, to show that the two diseases could exist simultaneously in the same patient.

ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Stated Meeting, January 13, 1880.

THE PRESIDENT, DR. SYLVESTER F. MIXER, IN THE CHAIR.

Present—Dr. S. F. Mixer, President; Dr. D. W. Harrington, Secretary; and Doctors White, Rochester, Miner, Boardman, John Cronyn, Gay, Thomas Lothrop, L. P. Dayton, B. L. Lothrop, O'Brien, Abbott, Howe, Phelps, Mynter, Slacer, Samo, Nichell, Keene, McPherson, Elwood, Hoyer, Earl, Folwell,

Dorland, Moody, Brecht, Sloan, Banta, Davidson, E. E. Storck, Campbell, Dambach, Dagenais, King, Briggs, Lynde, Hauenstein, Daggett, Barker, Bailey, Lapp, Nott, Hopkins, Diehl, Hartwig, Haberstro, Packwood, Sonnick, Schade, Bartlett, Kamerling, Brooks, Wyckoff, Macniel, Wetzell, Hill, Thurber, Jansen.

Drs. C. A. Wall, Jos. W. Keene, M. Hartwig, L. L. Banta, and Dr. Bideman were elected members.

Drs. W. W. Turner and Julius Krug were proposed for membership and referred to Committee on Membership.

The Special Committee, of which Dr. J. F. Miner is chairman, appointed to confer with The Charity Organization Society, presented their report.

The librarian report was referred to a committee, composed of Drs. Howe, Folwell and Thos. Lothrop.

Prof. White submitted the following preambles and resolution and moved that copies of the same be sent to the members of the Legislature from this District:

Whereas, The Erie County Medical Society fully recognize that medical science is in a great measure indebted to experimental physiology for its existence and development; and

Whereas, It apprehends that certain articles recently published in some of the metropolitan journals, foreshadow injudicious action on the part of certain so called philanthropists, which, if successful, will, in the opinion of this Society, prove highly detrimental to the progress of medicine as a science and its advance as an art; therefore,

Resolved, That our delegates to the State Society be and they are hereby instructed to vigilantly guard against and to vigorously oppose the adoption by the Legislature of any measures which may tend to limit or rescind the privileges of employing living animals for experimental purposes, which privilege is now granted to those engaged in physiological investigations.

The report and the motion were adopted.

Prof. White moved the adoption of the following preambles and resolutions and also that a copy of the same, signed by the

officers of the Society, be sent to Governor Cornell through Prof. Miner:

Whereas, The Health Officer of the Port of New York is soon to be named by Governor Cornell; and

Whereas, The important office is for the entire State, and therefore his selection should not be confined to any section or locality; and

Whereas, The selection for this important position has for many years been made exclusively from the eastern portion of the State; therefore, be it

Resolved, That in the opinion of this Society this appointment is now due, and therefore should be awarded to the western portion of the State.

Resolved, That this Society, representing the medical profession of the County of Erie and city of Buffalo, heartily commend to His Excellency Governor Cornell for nomination to this important office, Prof. Julius F. Miner, M. D.

Resolved, That Prof. Miner having been all his life a steadfast Republican, having achieved success as a general practitioner, as a teacher of surgery, and as an editor, and being well known throughout the State as a distinguished member of the profession, we believe him eminently well qualified for the discharge of the duties devolving upon the Health Officer and earnestly request his appointment.

Resolved, That we solicit this appointment in the conviction that it will be acceptable to the great body of the medical profession and eminently satisfactory to all interested in the commerce of the port of New York.

The preambles and resolutions, and the motion relating to them, were unanimously adopted.

The following officers were elected for the ensuing year:

President, Dr. F. F. Hoyer; Vice-President, Dr. John Hauenstein; Secretary, Dr. D. W. Harrington; Librarian, Dr. J. B. Samo; Treasurer, Dr. W. C. Phelps; Board of Censors, Drs. Nichell, Hoyer, J. C. Green, Sloan and Briggs.

On motion of Dr. Howe the President and Secretary were authorized to fill vacancies, should they occur among the delegates to the meeting of the State Society.

The retiring President read his address on "Sanitary Science," which was an able discussion of this important subject in its reference to sanitary matters in Buffalo, and the agencies to which they are entrusted.

The meeting then adjourned.

EDITORIAL.

MEDICAL JOURNALISM.

IN the days of the poet Juvenal there were men afflicted with a malady which he called *insanabile scribendi cacoethes*, and this scribbling cachexia—if it may be so translated—might appear to be prevalent in modern times among the members of our profession.

The first number of the *Index Medicus* contained a list of seven hundred and sixty-seven periodicals, relating to medicine or its collateral sciences. But all of these, whether modest or pretentious, may, in general, be divided into two classes—those for recording original observation, and those for retailing it to the professional at large. These two forms are often included in the same publication, but they are none the less entirely distinct. In Tyndall's lectures on "Light," he says:

"Three classes of workers are necessary; firstly, the investigator of natural truth, whose vocation it is to pursue that truth, and extend the field of discovery for the truth's own sake and without reference to practical ends; secondly, the teacher of natural truth, whose vocation it is to give public diffusion to the knowledge already won by the discoverer; thirdly, the applier of natural truth, whose vocation it is to make scientific knowledge available for the needs, comforts and luxuries of civilized life."

The same division of scientific labor exists to a certain extent in medicine. Men occupied in investigation alone, are comparatively few, and the elaborate details of method and reasonings often lie buried in ponderous volumes of "society transactions," "archives" and "annals." These are written principally for specialists, and in general are read by them alone. For example, there are twenty-seven periodicals devoted exclusively to anatomy and physiology, nineteen to obstetrics,

five to gynecology, eighteen to ophthalmology, forty-nine to "state medicine," sanitary and legal to a proportionate number to other branches.

The papers contributed to these form the cream of medical literature, and yet the busy physician seldom sees them. What he demands, is a convenient digest of the most practical points, and he finds it in our typical American Medical Journal. Thus it serves as the medium of communication between what Tyn-dall calls the "investigator" and the "applier" of natural truth.

A limited proportion of original communications are often acceptable, as are translations or clinical notes, but the selections, if good, are usually read first. As a whole, however, a journal is simply the medium, through which the medical thought of the vicinity finds expression.

Unless the professional standard of the locality is high—unless there be physicians acute in observing, careful in recording, and with sufficient zeal to express their opinions formally, a publication of this sort must inevitably languish and die.

It would, indeed, be a remarkable corps of editors who would, at stated periods, evolve from their own consciousness such mental pabulum, as would be invariably acceptable to a large class of readers. The few subjects, in which the individual writers might be interested, would necessarily be thrust upon the subscribers in repeated doses—*ad nauseam*—and simply result in establishing the egotism of the editor of that department.

The managers of this publication therefore cordially invite contributions of original articles, reports of cases, or other matter of interest to physicians; hoping thus, to add to its value professionally, to its interest locally, and trusting that the same elevated standard may be maintained, which, in former years has been reached by the BUFFALO MEDICAL AND SURGICAL JOURNAL.

THE METRIC SYSTEM.

At the last meeting of The Buffalo Medical Club, a committee, appointed at a previous meeting to investigate and report upon the advisability of the members of the Club adopting Metric weights and measures in the writing of prescriptions, reported favorably. After a thorough discussion, the members of the Club pledged themselves to the exclusive use of the Metric System, for at least one month subsequent to the 1st of February. The decision of the club, as to its permanent adoption, will depend upon the practical experience thus obtained.

The important advantage of a simple relation between the units of weight and the units of measure, and the recognized advantages of a decimal system, which has caused its adoption by all scientific men; and by the profession in Europe, will sooner or later necessitate its general use the world over. We are glad to see the Medical Club—an association of the younger physicians of this city—taking the lead in this matter.

THE HEALTH OFFICER OF NEW YORK.

IN the proceedings of the Erie County Medical Society, published elsewhere, will be found appropriate action, endorsing the name of Prof. Julius F. Miner, of this city, for the important position of Health Officer of the Port of New York. The unanimity with which the profession joins in urging the appointment of our late editorial confrere, and the universal favor with which the announcement of his candidacy is received, should impart an impetus to the movement thus inaugurated, which we hope will result in the recognition both of the claims of the distinguished individual, whose name is thus prominently brought forward, and of the section of the State of which he is the honored representative.

We but echo the sentiment of the entire profession, in stating that Prof. Miner's eminent fitness for the position, not only as to

professional attainments, enlarged experience, but also, as to administrative ability, will reflect great credit upon the wise judgment of Gov. Cornell, should he bestow this position now at his disposal, upon one so peculiarly adapted to perform its responsible duties.

VIVISECTION.

At the last meeting of the Erie County Medical Society, resolutions were presented by Dr. James P. White, and unanimously adopted, opposing measures, which have been brought forward in the Legislature, tending to limit the privilege now enjoyed of employing living animals for experimental purposes.

The subject referred to in these resolutions is one of no small importance to the profession and to the public. We only regret that in this issue we can not review the many benefits arising from vivisection, and contrast them with the narrow-minded quixotic spirit which actuates the bill now pending in the Legislature.

The great advantage of experimental study are so apparent to all intelligent physicians, that for them the claims of vivisection need no advocate. But it behooves them, as it does the medical press of the State, to exert all the influence that can be brought to bear, to defeat the passage of a bill which would be so prejudicial to the advancement of medical science, and therefore so detrimental to the public.

REVIEWS.

The Theory and Practice of Medicine. By FREDERICK T. ROBERTS, M. D., B. Sc., F. R. C. P. With Illustrations. Third American from the fourth London edition. Philadelphia: Lindsay & Blakiston. 1880.

The author of this very valuable contribution to the principles and practice of medicine has "endeavored to bring the information which it contains as nearly as possible up to the present

date." While the numerous standard authorities, such as Aitkin, Watson, Bristowe, Flint and others, compassing almost the same field of medicine, would seem to leave but meagre encouragement for further effort, yet the fact that the present work has already passed to the fourth London edition and the third American edition shows how ably our author has performed the task, and how thoroughly his work is appreciated by the profession. A critical examination of the work unfolds the reasons for its growing popularity among students and practitioners, for whom it is written. Its conciseness is especially noticable, and yet the effort to condense is not made at the expense of clearness of description.

On all the subjects which have excited discussion of late in the profession, the author does not hesitate to express the most advanced and enlightened opinions. For instance, in diphtheritic croup, he asserts that "the only possible hope lies in the performance of tracheotomy or laryngotomy," an operation which is growing in favor, on account of the terrible mortality attending this complication of pharyngeal diphtheritis. So also in obstruction of the bowels from strictures, strangulation, intussusception, the operation for opening the abdomen with a view of removing the cause, he thinks is decidedly permissible, if the case is otherwise hopeless. Indeed, we grow in interest as we read and examine the soundness of Dr. Roberts, not only in the theory he enunciates, but also in the practice based upon the principles he aims to establish.

The work is a most valuable one, and our readers should secure it for study and reference.

L.

A Biographical Dictionary of Contemporary American Physicians and Surgeons. Edited by WILLIAM B. ATKINSON, M. D., permanent Secretary of the American Medical Association. Second Edition, enlarged and revised. Philadelphia: D. G. Binton, 1880.

The publisher in his notice, states that the work is intended to include *all* who have visibly and publicly contributed "to the

advancement of medical science, in the United States, during the present generation," rather a broad scope for a modest volume of 750 pages.

It is to be supposed that great care and discrimination have been exercised, not only in choosing from among the many honored names which adorn the annals of the American profession, but in furnishing correct data as to professional attainments, etc. In looking over the list of physicians in this locality, whose labors and skill "have visibly and publicly contributed," to the purpose above indicated, we find that twelve have been thus saved from oblivion, through the extreme consideration of Dr. Atkinson, while others, of which our city may well be proud, are allowed to go down to the grave, "unnoticed and unhonored."

We may well conclude that such a work as the publisher here presents to the profession, if executed upon the plan stated in the preface, is not only premature, but fails to give a correct exhibit of medical men, whose abilities and attainments command for them the leading positions in their respective localities. We doubt, therefore, whether it fulfills any good purpose, except to flatter the vanity of the "fortunate few." L.

Atlas of Human Anatomy. Containing 180 large plates, arranged according to Drs. Oesterreicher and Erdl from their original designs, and those of the greatest anatomists of modern times. With full and explanatory text by J. A. JEANCON, M. D. Cincinnati, Ohio: A. E. Wilde & Co.

We have received a sample copy of this work, and are very favorably impressed with it. It possesses one advantage, viz: that all the plates are of life-size. The study of anatomy is very much facilitated by works of this character. Without good drawings and plenty of dissecting material, it is impossible to study anatomy with any benefit, and as the material is scarce in our colleges, the importance of good drawings cannot be overestimated. The plates are clear, truthful and correct, and we recommend them heartily to students, old and young. M.

Diseases of Women. By LAWSON TAIT, F. R. C. S. Second edition, thoroughly revised and enlarged. Specially prepared for "Wood's Library," New York. Wm. Wood & Co., 1879.

The author's object in this book, is stated to be, to offer in a condensed form the results of his own experience, which is known to be very extensive, in the department of gynecology. The publishers have conferred a favor upon the American profession in placing so valuable a work within their reach.

The author's effort to be brief, robs many chapters of the clearness which is found in the larger treatises, such as Emmett and Barnes. Nevertheless, a vast amount of practical knowledge upon a most important class of diseases, is furnished in this modest little volume, valuable to the experienced gynecologist, in the practical hints it furnishes on many difficult subjects, and also to the younger practitioners, in giving a safe guide, on account of its marked conservatism, in the treatment of this class of diseases. The chapter on the ovaries, the most extensive in this work, will especially repay a careful perusal and study. The book maintains the high reputation of this series. L.

Photographic Illustrations of Skin Diseases. By GEORGE HENRY FOX, M. D., Professor of Dermatology, in Starling Medical College. New York: E. B. Treat, 805 Broadway.

The second, third and fourth parts of this excellent work have reached us. The second part contains four plates, Keloid, Rosacea, Psoriasis nummulata and Ichthyosis simplex. The third part contains five plates, Fibroma pendulum, Varicella, Zoster pectoralis and lumbalis, Eczema universale. The fourth part contains Leucoderma, Chromophytosis, Favus capitis and corporis, and Eczema cruris. The plates are all as life-like and truthful as possible. We consider them superior to anything yet published, and cannot be surpassed. M.

American Cyclopædia of Domestic Medicine and Household Surgery.

By SAMUAL PAYNE FORD, M. D. Chicago: E. P. Kingsley & Co. J. Huggill, Cincinnati. W. A. Edwards, St. Louis. 1879.

This is a large work of over twelve hundred pages. With a view to ready reference, the contents are arranged alphabetically. Unlike nearly all books with similar titles and purposes, it has not the slightest tinge of quackery; on the contrary, its author is a regular graduate of the Medical College of this city, as well as of the University of Toronto, Ontario, while the teachings and advice are sensible and sound throughout. All forms of popular superstition and quackery are discountenanced, and it has evidently been the author's aim to enlighten the ignorance of all classes. For this reason, we consider the introduction of this work opportune, and believe it the duty of physicians generally to recommend it to families in their care.

V. P.

Paracentesis of the Pericardium. A Consideration of the Surgical Treatment of Pericardial Effusions. By JOHN B. ROBERTS, M. D., Lecturer of Anatomy in the Philadelphia School of Anatomy Philadelphia: J. B. Lippincott & Co.

The author has, with great diligence and care, gathered from journals and text-books 60 cases, in which this operation has been performed; 24 recovered and 36 died, the mortality being 60 per cent; since 1860 the operation has been performed 35 times, with 10 recoveries, the mortality for that period being 71.42 per cent, but the author calls attention to the fact, that there were serious and fatal complications in many cases. By excluding these cases, he finds, in 13 uncomplicated cases of pericardial effusion, that the result was ten recoveries and three deaths, the mortality being 23 per cent, a very favorable result, indeed. The author treats in different chapters of the etiology, symptoms, diagnosis, prognosis and treatment. The work is a well written and interesting little monograph.

M.

Memorial Oration in Honor of Ephraim McDowell, "The Father of Ovariectomy." By SAMUEL D. GROSS, M. D.

There is something quite touching in this tribute of respect from one of the ablest to one of the oldest surgeons of this country. Not only are the claims of priority in ovariectomy fairly discussed, but a historical sketch of the operation is given, showing how much America has contributed to our knowledge in this department.

A well executed engraving of Dr. McDowell serves as the frontispiece, while the arrangement and typographical dress of the book reflect considerable credit upon the publishers. H.

A System of Midwifery. By WILLIAM LEISHMAN, M. D., Regius Professor of Midwifery, in the University, of Glasgow. Third American edition, revised by the author, with additions by John S. Parry, M. D. Philadelphia: Henry C. Lea. 1879.

The former editions of this work are well known in this country, and are universally praised. The death of Dr. John S. Parry, has thrown the work of American editor into other hands. Dr. Parry's former additions have been retained, and in the words of the author, in the present edition, "such alterations have been made, as the progress of obstetrical science seems to require."

The present edition is a work of something over seven hundred pages, and contains two hundred and five illustrations.

We can heartily recommend it as alike valuable to students and practitioners. V. P.

BOOKS AND PAMPHLETS RECEIVED.

The Physician's Hand-Book for 1880. By WILLIAM ELMER, M. D., and ALBERT D. ELMER, M. D., New York. W. A. Townsend, Publisher, 1880.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M. D., F. R. C. P. Professor of Obstetric Medicine, in King's College. Third American edition, with notes and additions, by ROBERT P. HARRIS, M. D. Philadelphia: Henry C. Lea. 1880

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ORIGINAL COMMUNICATIONS.

THE RELATION OF MEMBRANOUS CROUP TO DIPHTHERIA.

BY J. O. ROE, M. D., ROCHESTER, N. Y.

THERE is no subject in modern medicine which has recently received a greater amount of attention, and concerning which wider opinions are held, than the relation of membranous croup to diphtheria.

Some can only discern one common disease with a variety of manifestations; while others see in each an independent and distinct affection.

Diphtheria, as a disease, has evidently existed since the earliest times. In the examination of the oldest writings of medical authors we find it clearly described, although under nearly as many different names as there were authors alluding to it. Diphtheria is supposed to be the disease alluded to in passages of Homer, and it is quite clearly traced to the time of Pythagoras (580-489 B. C.) Hippocrates mentions it in his writings, but to Bennett, in the early part of the 7th century, is due the honor of first describing it as it exists at the present time. The

*A paper read before the Monroe Co. Medical Society.

syriac ulcer or the malum aegyptiacum as described by Aretaeus, the askara frequently mentioned in the Talmud; later the morbus strangulatorium, male in canna, and the morbi suffocantis garrotillo which prevailed in Spain between the years 1581 and 1611, were undoubtedly the same disease; as all are described as highly contagious affections of the throat of a very fatal character.

By Aretaeus it was also described as a cynanchia (or dog-choke,) and existed in two forms, an inflammation of the respiratory organs, and an affection of the breath. In the first form it affected the tonsils, epiglottis, pharynx, uvula, and top of wind-pipe. In the second, the organs became collapsed and a sense of stifling, so violent, that it seemed to the patient as if the inflammation was secretly concealed in his chest, in the vicinity of the heart and lungs. This second form he termed "internal choke" and considered it merely a disease of the breath. (*Ætiology and Semiology*, Renold's translation, p. 13).

The above is in substance the opinion held in regard to the disease, and the term "cynanche maligna" was universally applied to it, until a century ago, when in 1765 an epidemic of the disease appeared on the eastern coast of Scotland, in which the laryngo-tracheal symptoms bore so conspicuous a part and differed so much from those affecting the pharynx alone, that it was described by Dr. Home under the name of "croup"—a Scotch word, first introduced into medical literature by Dr. Blair of Cupar Angus, in 1713.

This new disease, as it was then called, attracted considerable attention from the profession, and, assisted by the able memoir of Dr. Home, produced so deep and lasting an impression, that many of our most able writers and accurate observers have, with great reluctance, been compelled to adopt the original and evidently correct idea of the unity of the two affections.

The word "croup" or "croups," was used by the populace previous to the time of Home; but chiefly applied, as at the present day, to cases of "laryngitis stridulous," now known as false or spurious croup.

The two diseases were considered as independent affections until the time of Bretinneau, who was the first to give the name diphtheria to a membranous formation found in the throats of those who were attacked by the disease during the outbreak at Tours, in 1818.

The appearance of the common characteristic, a membranous formation, led many to believe in a common origin for the two diseases: the teachings of Bretinneau, supported by his distinguished pupil Trousseau, so influenced the leading French pathologists that the unity of the two diseases has since been pretty generally taught.

The points of difference on which the advocates of the duality theory base their conclusions are:

1. The supposed pathological difference.
2. The alleged clinical difference.

In 1847, Virchow, afterwards Wagner, Rockitansky, Buhl and Riendfleisch, attempted to find the distinction between the membrane of the two diseases in the appearance and anatomical constituents of the exudate. They and their followers were soon compelled to abandon all such attempts, for in the examination of membranes from the two, as they supposed, unquestionably different sources they were unable to find any chemical, microscopical, or general distinction to indicate their origin. Not being willing to relinquish altogether their views as to a pathological difference, they then sought to explain it by the manner in which the exudate was thrown out. In croup it was poured out in a liquid form and coagulated on the surface of the membrane, and could be readily removed, leaving, perhaps, a hyperaemic but smooth surface; while in diphtheria the mucous membrane was incorporated more or less with the exudate, that it was poured into the substance of the tissue, and on removal left a raw and bleeding surface.

This supposed distinction had soon to be abandoned under the light of investigation, for it was amply explained by the difference in the structure of the parts, and the length of time which the exudate had been thrown out.

In the earlier stages of a membranous formation the exudate is easily peeled off and removed; but in the latter stages there is more or less destruction of the superficial tissues and muciparous glands, so that the mucous, which is the active agent of lifting the membrane, is not secreted; and the exudate penetrates more deeply into the tissues. Now, in croup, it is during this early stage that the larynx and trachea become blocked, and suffocation takes place before the second stage is reached.

Having thus failed to establish an anatomical or pathological distinction, it was then sought for in a clinical difference based on the following phenomena. The universal and characteristic symptom of croup has been considered to be the presence of a false membrane, in contra-distinction to diphtheria, in which it may be absent, and to false croup which includes laryngitis stridulous.

These were the views of the French pathologists, except that it was considered a form of diphtheria. The failure to find a false membrane in patients who had died of typical croup began to shake the belief of many and caused them to seek for the explanation of this apparent paradox. Rayland and Sir Thomas Watson mention the occurrence, and Geo. Johnson was much surprised to find on a post-mortem examination of two unquestionable cases of croup, no appearance of a false membrane in any part of the air passages. (*Lancet*, April 26, 1879, p. 592.) This phenomenon is explained by Steiner, by the possibility of a membrane being present during life, in a fluid or coagulated form, but expectorated before death. (Ziemsson's *Cyclopædia*, vol. iv., p. 256.)

Again it is considered that diphtheria is a disease of the pharynx and spreads upward to the nares, and only occasionally extends to the larynx and trachea, while croup is regarded as a disease primarily affecting the larynx, and is confined to this region and to the trachea. "The fact is," says Mackenzie, "that croup is a disease which commonly commences in the pharynx, and only in about 10 or 12 per cent. of cases originates in the larynx

and trachea." (Diphtheria: Its Nature and Treatment, London, 1879, p. 83.)

The third and strongest point on which the duelists fix their faith is the theory, that croup is local and is not contagious, while diphtheria is a general or constitutional disease and is contagious.

A glance at the anatomy of this region will readily explain the limited amount of constitutional disturbance, on the ground that the general symptoms are secondary and commensurate with the local processes.

In all systemic diseases attended by local manifestation, the extent of the local symptoms is, *pari passu*, proportionate to the general disturbance, and if the disease be light the local evidence is often wanting altogether. This is true of scarlet fever, measles, and sometimes even of small-pox.

The parts most readily and violently attacked by the diphtheritic inflammation are those covered with pavement epithelium, and most scantily supplied with muciparous follicles. This is owing to the fact that pavement epithelium is lower in the scale of animal life, that vibrating epithelium will resist destructive changes longer, and when there is an abundant supply of muciparous glands the pouring out freely of the normal secretion prevents as a rule deep-seated degeneration of tissue.

When the local diphtheritic inflammation attacks the tonsils or pharynx as it usually does, it extends by continuity of structure over the surface covered by the pavement epithelium; but at the entrance of the larynx it is met by the sentinels, the little resisting cilia of the epithelium covering the ventricular bands or false vocal cords and the venticles.

If the disease has not sufficient force, they are equal to the emergency of arresting its progress in this direction. If the inflammation attempts to travel upward, it is met by the same opposing force in the lower portion of the nasal cavity. If, however, the disease is raging with sufficient energy to overcome these barriers, a general nasal laryngeal and tracheal diphtheria

is the result, always of a very grave character, not only from its extensive local implication, but as indicative of the degree of systemic affection.

When the local manifestation first appears in the pavement epithelium covering the vocal cords, it is naturally confined to a very limited area. If it attempt to surmount into the pharynx it is resisted by the little cilia of the ventricular bands. If it attempt to extend itself into the bronchia, it is resisted by the cilia there, though less strongly owing to the thinness of the membrane. So in the distribution of the tissue which has the least resisting power to the destructive poison, we find the solution of its usual limitation to the pharynx and tonsils, when it chooses the larynx for its first invasion, it obstructs the gate-way of life so quickly that in many cases death takes place before the attendant train of symptoms, as asthenia, implication of the lymphatics, albuminuria, etc., have had time to appear.

The fact of the greater liability of the implication of the lymphatics of the neck in pharyngeal and nasal diphtheria, than in croup or tracheal diphtheria, is owing to the distribution of the lymphatic communications.

The tonsils have no connection with the lymphatic system, but the tongue, uvula, soft palate, anterior and posterior pillars of the pharynx, cheeks, lips and the lower portion of the nasal cavity, contain numerous lymphatics, which connect with the deep facial, deep cervical, submaxillary and finally the supra-clavicular and jugular plexus. In the larynx and trachea are found no lymphatic glands and but few lymphatic vessels. These latter terminate in the solitary glands at the side of the trachea, and do not communicate with the general lymphatic system. The trachea is also abundantly supplied with muciparous follicles, which pour out their secretion, lift the exudate, and cause the easy separation of the tracheal membrane without affecting the surface beneath.

The rarity of albuminuria in croup is, as already mentioned, due to the slight amount of lymphatic implication and to the

extremely fatal character of the disease; death usually occurring from suffocation before there is sufficient time for albuminuria to become established, and if present in these cases, it is not often looked for.

The great fatality in children is due to the smallness of the larynx, the greater number and size of the lymph vessels, the frequency of catarrh of the nares and also of the mouth from lack of cleanliness and enlarged tonsils.

In a family, which I attended recently, a child died of laryngeal diphtheria, with no pharyngeal manifestations. The father and mother were taken shortly after with membranous laryngitis, but recovered. This case would ordinarily have been considered a genuine case of croup.

It is claimed for croup, that it is a non-contagious malady, while diphtheria is a markedly contagious disease. The belief in the non-contagious character of so-called membranous croup, is based on the frequent occurrence of cases, where there was no apparent exposure to any diphtheritic infection, and where one member of a family of children is attacked without its being communicated to the others.

To show that diphtheria is a contagious disease, no argument or proof is required, but to say that exceptions are not constantly occurring, would be to deny what is almost a daily observation.

When diphtheria has died out as an epidemic, the stray cases with limited infecting power will be known for years or decennia as so-called sporadic membranous croup, as one would speak for a generation of an occasional case of spasmodic cholera, or a stray case of variola. There is not infection enough to poison the throat, and larynx and blood, but just sufficient for the most favorable place, the vocal cords.

Mackenzie says: "The dangers which are most to be dreaded at the outset of an attack are on the one hand, extension of the disease to the larynx, and on the other, severe blood poisoning." Again he says, "diphtheria is, for obvious reasons,

far more fatal amongst children than adults," and again, "when the exudation shows a disposition to extend rapidly, the danger is very considerable as the extension is most likely to take place in the direction of the larynx." (*Diphtheria: Its Nature and Treatment*, p. 64.)

To cite more evidence to show that the chief symptom in the earliest stages, of a serious import, is the tendency to the involvement of the larynx, is to reiterate what is our daily observation during epidemics of diphtheria; and when it becomes thus early involved, the symptoms are so nearly identical with those produced by so-called "true membranous croup" that the attempt to distinguish between the two, says Johnson, is hopeless and most confusing to the student, for it is certain that membranous croup and laryngeal diphtheria, as we now see them, are one and the same malady. (*London Lancet*, 1875, vol. 1, p. 81.)

The cause of the more frequent recoveries from tracheotomy in croup than in diphtheria is due to the fact, as has already been shown, that the cause of death in croup is from obstruction of the larynx and trachea by the membrane.

It is claimed for croup that it is a sthenic disease, while diphtheria is asthenic and attended by more systemic depression. A study of the cases which come under our observation, and a glance at the disease as described in works of practical medicine, will at once convince us of the error of this assumption.

In order to settle the question as to the relationship of the two diseases, last winter the Royal Medical and Chirurgical Society appointed a committee to conduct the investigation. To obtain sufficient data on which to base a conclusion, a circular was issued with a complete list of questions concerning all the points at issue. To these ninety replies were received mostly from men of extended observation and experience; besides all the records of hospitals, and information from every possible source was obtained. The following is a synopsis of the conclusions which were based on the evidence furnished.

1st. Membranous inflammation confined chiefly to or affecting the larynx and trachea may arise.

a. From the diphtheritic contagion.

b. By means of foul water, air, or other agents.

c. As accompanying measles, scarlet fever, typhoid fever, etc.

d. From various accidental causes of irritation, as the inhalation of hot water, steam, contact of acids, etc.

2d. Following or associated with exposure to cold, but not to exclude the possible co-existence of other causes.

3d. Membranous inflammation chiefly of the larynx and trachea to which the term membranous croup would commonly be applied, may be imparted by an influence, epidemic or of other sort, which in other persons has produced pharyngeal diphtheria.

4th. And conversely, a person suffering with the membranous affections chiefly of the air passages, such as would commonly be termed membranous croup, may communicate to another a membranous condition limited to the pharynx and tonsils, which would be regarded commonly as diphtheria. From these facts the committee conclude that membranes, chiefly laryngeal, are so often associated with similar ones on the fauces, and such general constitutional condition that no line of demarcation can be drawn, except that when the pharynx is primarily affected, constitutional disturbance is more marked.

All the points at issue have been gradually relinquished by those who have advocated the non-identity of the two affections, until the dispute is narrowed down to the question whether "Membranous laryngitis is always caused by the special poison of diphtheria."

In regard to this question what can be more explicit, when in section 3 and 4 the committee says, that membranous croup may be imparted by an influence, which in other persons has produced pharyngeal diphtheria, and conversely a person suffering from "membraneous croup" may communicate to another diphtheria.

In order to reconcile those whose views differed so widely on this subject, and to form a more uniform basis for reports in the future, in conclusion, the committee suggests that the term croup be *henceforth used* wholly as a clinical definition, implying laryngeal obstruction occurring with febrile symptoms in children. Thus croup may be membranous or not membranous, due to diphtheria or not so, and diphtheria may or may not be attended with croup. The committee, therefore, propose that the term membranous laryngitis should be employed in order to avoid confusion, whenever the knowledge of the case is such as to allow of its application. (Report of Committee, p. 31—33, 1879.)

This seems an eminently wise conclusion, and by it the original Scotch word, croups or croup, is restored to its primitive signification, as describing the purely subjective symptoms of laryngismus stridulus, laryngeal spasm or spurious croup, so common to children, and not the objective condition of a membranous formation.

It would be interesting to follow through the course of this debate, which took place in the Royal Medical and Chirurgical Society, on this most important question, but space will not permit. There is one question about which many are in doubt, it is the relation of membranous formation in the fauces after exposure to colds, foreign substances, and chemical agents, and the occurrence of false membranes on wounds, burns and denuded surfaces. On a close examination of these cases it was found that these accidental occurrences were associated with a special condition of the system. If it was the rule for wounds and abraded surfaces to become covered with a membrane, then it could not be explained by a diphtheritic origin, but as the occurrence is a rare exception, it is no more unreasonable to attribute it to a diphtheritic (if we might so call it) condition of the system or diphtheritic complication than to ascribe certain symptoms supervening with another disease to typhoid complication.

In consulting the older works on this subject one would be led to consider membranous croup a very frequent and fatal malady. Tanner (*Prac. Med.*, p. 501) estimates that one in twelve children died of this disease. He found in London, in 1866, the fatal cases attributed to this disease amounted to 5,168, of which 2,706 were males and 2,462 females; while the committee has, from all the reports of hospitals, dispensaries and private records, been able to collect only 49 cases, which could be properly considered as primary membranous croup. This very great and increasing rarity of this disease is undoubtedly due, as suggested by Dr. Poore (*Lancet*, May 3, 1879, p. 630,) to increasing knowledge of diphtheria.

The last, and perhaps the most plausible theory, if it could be shown to be true, is the bacterian or germ theory for the local cause of diphtheria as a distinction from membranous croup.

By Brettineau. the active contagious principle was considered to reside in the secretions from the membranous exudate alone; that without an exudation there could be no diphtheria; that it only spread in the form of dust like atoms and could only be conveyed by inoculation.

These views were not universally accepted, for most physicians recognized its infectious character and believed, as with the majority of physicians at the present day, it to be a systemic disease.

Laycock, in 1858, and Jodin in 1859, were the first to demonstrate the presence of parasitic elements in the diphtheritic slough or false membrane.

Buhl, in 1867, also drew attention to the same fact, and shortly after Oertel and Heuter discovered that the membrane and secretions of the subjacent diseased parts, and even of the blood of persons sick with diphtheria, contained in great numbers vegetable organisms or bacteria, to which Oertel gave the name of micrococci.

In accordance with this belief in the causative agent of the disease, Oertel declares that diphtheria begins as a local disease and develops often into a general one, and that, moreover, the general infection is kept up by the local one. The disease establishes itself at first in one spot, the focus of infection, and from thence radiates, as it were, through the body, until by general blood poisoning it renders the organism incapable of life. (Ziemssen Cyclopædia, vol. 1, p. 581.)

Thus, the bacterian theory of disease is invoked as a distinction to differentiate the two affections, for it is contended that in croupous membranes bacteria are never found, but if so, they are purely accidental and play no part as a causative element in the disease.

The presence of bacteria in the pharyngeal diphtheritic exudate is proven beyond question; but it is nevertheless true that they are of very frequent occurrence in the laryngeal or tracheal exudate of croup, and they are also found swarming in the mucous of these membranes, when in an undoubted state of health.

According to the bacterian theory, diphtheria is not a general blood-poisoning or a previously existing disease, which first produces the membrane, but it is these parasites which are drawn in with the inspired air and lodge on the surface, which accounts for its usually choosing the throat as the seat of the primary local manifestation; indeed, Eberth goes so far as to declare that "without micrococci there can be no diphtheria." (Zur Kenntn. der Bacterit. Mycosen, Leipz., 1872.)

That diphtheria is a filth disease but few will deny, as nearly all cases are found, when occurring sporadically, to be associated with some local surroundings, in which hygiene is disregarded or, when occurring as an epidemic, to some general atmospheric poisoning. The analogy, which diphtheria bears to typhoid fever in its mode of development and propagation, is very striking. In typhoid fever the disease has a special selection for Payers' Patches; while in diphtheria the throat and bronchial mucous membrane is the chosen site.

We all recognize the relation of acute infectious diseases to heat, cold, moisture, and the impregnation of the atmosphere with the emanations from decaying animal and vegetable tissue, but to attribute the phenomena of diphtheria and all the specific fevers, as has been attempted, to the presence of germs, (Dr. MacLagan on Germ Theory, London, 1876,) the proof is not sufficiently positive to warrant such a conclusion.

If the presence of germs explain the origin of these diseases and particularly of diphtheria, then we should be able by means of the microscope to detect the cause of the mildness or virulence of cases, or epidemics of diphtheria to reside in the prevalence of these germs in greater or less number, or in a greater or less size and activity of the germs.

This has been attempted by many eminent microscopists, but all their efforts have thus far proven utterly futile.

In order to prove that in these germs reside the contagium vivum, Oertel attempted to prove by a series of experiments on lower animals, that diphtheria fixes itself at the point of inoculation and radiates from that place throughout the body.

This same fact is true of syphilis and vaccine virus, but who will attempt to say that syphilis is of bacterian origin, and with vaccine virus it is positively shown not to be the case.

In order to determine if possible the nature of the infectious principle of diphtheria and the circumstances that determine the infection, a series of experiments were instituted by the New York Board of Health, under the direction of Drs. Thos. E. Satterthwaite and Edward Curtis.

The first series of experiments were made by inoculating rabbits with diphtheritic membrane. Thirty-eight were inoculated, of which twenty-two died, but not with symptoms resembling diphtheria.

Inoculations were then made with scrapings from the upper surface of a somewhat furred tongue from a healthy person, and which swarmed with bacteria. The effect in these were similar to those from the diphtheritic membrane. Chohen's fluid, which

had become putrid, was then used with similar effect but in a less degree. In order to exclude the possibility of a local cause inoculations were made with sand, but with negative results.

To determine, if possible, whether the poisonous principle resided in the fluid or solid elements, the infectious infusion was filtered through porous clay; with the filtrate, which was perfectly clear and inodorous, inoculations were made, but with entirely negative results, while the residue or the unfiltered infusion was found in all cases to be more or less virulent. It being determined that the infectious element resided in the residue or solid portion, the next step was to determine if it was especially connected with the bacteria formed in the infectious material. This was accomplished in two ways:

- 1st. By arresting the propagation of bacteria by salicylic acid.
- 2d. By destroying them altogether by a prolonged temperature of 212° Fahr. and boiling alcohol, and then placed under circumstances favorable to the development of bacteria.

Inoculations made with the infusions thus treated continued equally as poisonous as before, although in many instances no bacteria were developed or could be detected. Hence it was determined that "the granules, which are the bodies most likely to represent the poisonous principles, appear not to be bacteria or their spores." (Satterthwaite, *N. Y. Med. Record*, 1875, p. 853. Also report, New York, Feb. 11th, 1877.)

To confirm the above experiments, vaccine virus was mixed with salicylic acid, which prevented the appearance of bacteria and decomposition, and preserved the lymph in a fresh state for a long time, but did not lessen in the least its active effects. The same was also found by Dr. Curtis to result when carbolic acid was used.

After the discovery of torulae in fermenting substances by Pasteur, it was held by him and others that fermentation and putrefaction were always initiated by organisms, until Bastain (*London Lancet*, April 10, 1875, p. 508) showed that "grapes suspended in an atmosphere of carbonic acid, undergo fermentation

so as to generate alcohol and other products, even without the presence of torula or other organisms."

Notwithstanding the above facts, there can be little doubt that these organisms which are so generally found associated with fermentive and decomposing processes, bear a certain relation to diseased processes. Not that they are capable of inducing disease *per se*, but that they are intimately associated with conditions which produce it (as has been shown by Bastain, Panum Onimus, Hiller, Chauveau, Curtis, Satterthwaite and others,) and their presence in greater numbers and activity simply indicate the extent of the unfavorable conditions which give rise to their development.

Thus these facts adduced in opposition to the germ theory in general are equally available as objections to the bacterian origin of diphtheria as a distinction from membranous croup.

In the debate upon the germ theory of disease which occurred in the Pathological Society of London, in April and May, 1875, (*London Lancet*), it was strenuously opposed by Carlton Bastain, in his very able and scholarly address on opening the debate and in the discussion by Geo. Johnson, Lionel S. Beale and by Murchison and Dougall of Glasgow, and others.

Dr. Burdon Sanderson who had supported the germ theory since 1870, on what he then considered to be the strongest grounds in its favor, viz: "the theory that in these processes of disease in which minute organisms are found, the life which interferes in these processes is not only the life of the tissues themselves, which are the seat of disease, but another kind of life is introduced."

He said that, "notwithstanding the theoretical change which has taken place in regard to the inseparable connection, which bacteria seems to have to disease and the doubt which has arisen as to whether they were a cause or consequent of morbid processes, we should not put away facts, we should still keep to the investigation of facts, clinical facts and pathological facts as our principal object; He also added, "supposing any one of us

went to Ricklinghausen, Virchow, Chaveau, Paget, and ask the question, 'Do you believe in the germ theory?' the answer he would certainly get would be, 'I really cannot give you any opinion upon the subject. A great number of observations have been made upon the subject; you must read these observations; then, if you wish to pursue it you must make observations yourself, and perhaps, at a future time it may be possible to come to a conclusion upon this subject.' But if they were pressed to give an answer to the question, 'Do you believe in the germ theory?' I believe all these eminent men would shrug their shoulders."

The question naturally presents itself, if these minute germs of vegetable life are the causative agents in diphtheria, why should they limit their operations to the tonsils and parts adjacent, while all other portions of the respiratory tract escape in the great majority of instances? for it has not been demonstrated that the parts covered by pavement epithelium are a more fertile feeding ground for bacteria than other surfaces.

"Surely," says Lyons *opt. cit.* (proceedings of the Connecticut Medical Society, 1876) "these germs as they are swept along over the fourteen hundred to two thousand square feet of respiratory mucous membrane, ought to be able to obtain a foothold and to produce irritation and inflammation in more than one particular place, unless Oertel, Heuter and others have greatly overrated their clinging, boring and other pernicious properties. Finally, it appears impossible to explain cases of diphtheria terminating fatally in 24, 36 and 48 hours, with little or no membrane in the throat upon the bacterian theory, which would seem to require more time for its fatal operation than is thus allowed.

"It must, therefore, be acknowledged that this brilliant theory, though begotten within the temple of science, and fostered by her ablest experts, is yet quite unable to stand the tests of experimental investigations, or of too feeble growth to withstand adverse criticism, or to cope with its older rival, the chemical theory."

CLINICAL REPORTS.

EXTRA-UTERINE PREGNANCY; DEATH AND REMOVAL OF FŒTUS — BY PROF. JAMES P. WHITE, M. D.

REPORTED BY WM. D. GRANGER, M. D.

THE following record, made by Dr. White, when he first saw the patient, will best serve our purpose in presenting the early history of this case.

"Mrs. G., age 26; menstruated at 15, married at 19; first pregnancy; pregnancy suspected December, 1878; menstruation, or irregular losses of blood continued during the succeeding three or four months; slight, but frequent; saw no shreds or membranes in the discharge; after three or four months flow less frequent; felt life at the expected time, fore part of April, 1879; suffered a great deal of pain in the lower part of abdomen, and the child's motions gave greatly increased pain; motions continued frequent, and were plainly perceptible to husband up to the following July, when they suddenly ceased; the abdomen diminished in size, the breast became flaccid; and all symptoms of pregnancy, except abdominal enlargement, disappeared; menstruated in August and September, but has not been regular since. About November 1st, Dr. Varian, her physician, dilated the os with sponge tents, so as to enable him, as he told her, to pass his finger to the fundus; found nothing there. Dr. V. diagnosticated extra-uterine pregnancy. Nov. 11, 1879, patient came to me and I made a careful examination. Tumor on right side, and nearly up to umbilicus; tumor quite solid; think I can make out the lower extremities of fœtus; abdomen tender, and has been since the dilatation of the os; tumor extends downward in the vaginal cul-de-sac; os patulous; sound enters into the organ $3\frac{1}{2}$ inches; nothing to feel in the cavity by sound; general health quite good; confirmed diagnosis of extra-uterine pregnancy, with death of fœtus; recommended

tonic and good diet, and waiting for indications." Dr. Varian, of Titusville, Pa., in his notes says, that in March, 1879, patient was supposed to be threatened with miscarriage; that the pains simulating labor pains, had been of daily occurrence; vomiting was violent, frequent and stercoraceous, and she was greatly emaciated; under treatment patient regained fair health. Again in May, patient had persistent vomiting, and again in August, but the uterine pains and the hemorrhage did not return. About two weeks after, Dr. White saw the patient; she suffered from prolonged vomiting, and also had abdominal pains, though not very severe. At Dr. White's request, the reporter wrote the husband, advising in case the stomach refused to perform its work to sustain her by rectal alimentation, and, if in spite of this, patient lost in weight, strength and health, or if local inflammation seemed to be ensuing, or if the tumor seemed to be pointing, advised an operation for the removal of child, and so assist nature in the performance of a work, because the effort to do it, if unaided, would probably destroy the life of the mother. The patient was reported as improved. But this soon proved apparent, not real, for a month later, in January, she was reported to be losing in health and flesh, and unable to retain food. The advice for an operation was again unheeded. Early in February she was reported much worse, and an operation, delayed two months against advice, consented to. The operation was performed February 7th, in the presence of a large number of physicians. Dr. White was assisted by Dr. Varian, Dr. Thomas Lothrop, Dr. O'Brien, and the writer. Dr. Barr, of Titusville, administered the ether. Before beginning the operation, Dr. White stated at length the history and diagnosis of the case, substantially as given in this article. He would operate because the patient's life depended upon it; she was emaciated to the last degree; was very anæmic; she could retain no food in the stomach, and she could live but a few days longer. With such a decaying mass and accumulation of pus in the body, the blood was poisoned, causing the vomiting, interfering with

assimilation of food introduced by rectum, and therefore bringing on the anæmia, loss of flesh, and the great prostration from which she is now suffering. As for the operation, the object is to remove the child; whether the placenta would be removed, would depend upon its situation and its attachments; he would prefer to remove it if it could be easily accomplished. Exactly *how* the operation would be performed, it was impossible to fore-tell. It was one of expectation; each step would have to be deliberately decided upon before taken. He intended, if possible, to make an exploratory incision upon the median line, between the umbilicus and pubis, expose the sac, stitch it to the parietes to prevent overflow of fluids into the peritoneal cavity, and enlarge the opening sufficient to extract the fœtus. When examined previous to the operation, there was no projecting tumor in the abdomen to be seen, only a little fullness; but a hard tumor with distinct outlines was easily felt. The exploratory incision, two inches long, was made, the parietes carefully dissected and the sac exposed; the opening was enlarged to about four inches; the tumor being more or less adherent to the walls of the abdomen, a small part of the upper end of the wound, which extended slightly beyond the sac, was the only opening directly into the peritoneum. The degenerated and friable sac easily ruptured when examined, and foul and offensive gas and fluid escaped; the opening in the sac was quickly enlarged, and a well-developed female fœtus of about six and one-half months was extracted by its feet. The head was entirely destroyed, and the occipital and two parietal bones were afterwards taken out from the sac. With the exception that the floating ribs had perforated the skin, there was but little other signs of advanced decay. The placenta was not found attached, but broken-down portions of it were found in the sac, and together with a thick fluid, partly pus and partly broken-down tissue, was removed, and the sac thoroughly cleansed by sponges, washed in strong carbolic acid water. The sac extended into the pelvic cavity, and a finger

introduced into the sac, met in Douglas' cul-de-sac, with only a thin wall dividing them, a finger introduced into the vagina. A trocar was passed from the most dependent part of the sac into the vagina, and a medium-sized, gum-elastic catheter was introduced, tied with a ligature, which came through the abdominal wound, and was left in place to serve as a drainage tube. The wound was brought together by deep silver stitches, which included the sac, and by superficial stitches between. Very little blood was lost during the operation. It is impossible to say just what variety of uterine pregnancy this case presented. If it had been tubal, it most probably would have ruptured during the severe pains of the first few months. Beside the uterus and the right ovi-duct were in position. The uterus could be easily felt before the operation in front of the tumor. It probably was some of the forms of abdominal pregnancy. The ovarian form while it is denied by some writers, is certainly very rarely seen and did not give evidence of being present in this case.

For the first week after the operation, the patient was under my care. She rallied well from the shock of the operation, and that evening had a good pulse of 128, and a temperature of $99\frac{1}{2}$. The highest temperature was on the evening of the fourth day, $100\frac{1}{4}$; on the evening of the seventh day the pulse was 110; temperature, $99\frac{1}{2}$; the next morning, pulse 112; temperature, $97\frac{1}{2}$; patient improved steadily after the operation; she vomited the little food given until the seventh day; the stomach was given a perfect rest, and food was introduced by the rectum only; whiskey, beef tea, milk and egg were freely given; also, quinine, gr. v., dialysed iron, mm. xx three times a day. At the end of the week patient had lost the pinched starved look; her lips were red; she had gained greatly in strength and a little in flesh. On the seventh day she began to take small quantities of food by the stomach, which was well borne. The discharge from the sac was profuse and very offensive, but diminished and became less offensive at the end of the week. The sac was syringed out twice a day

with a five per cent. solution of carbolic water, several quarts being used, until it ran from the drainage tube a clear stream.

After Saturday, Feb. 14th, the case came under the charge of the Drs. Waid, of Spartansburgh, Pa. They report improvement up to Thursday, (the 12th day after the operation); the patient taking soft boiled eggs, milk and beef tea by the mouth; the silver stitches were taken out, and the discharge became much less, and all except a point at the lower edge of wound, and near the upper edge, where discharges continued to come, was granulating. Thursday the doctors began to suspect that undigested food was coming from the openings, but not until Saturday, Feb. 21st, when it became abundant, could they clearly make out undigested milk, egg, etc.; the patient's condition changed, and she began to lose strength, and to have a quickened and weakened pulse, though at no time did the thermometer show any fever; at the time the discharge of food began, the patient's appetite enormously increased, and continued until the second operation. A consultation was held on Monday, Feb. 23d, Dr. White unfortunately not being able to be present, and it was decided to re-open the abdominal wound, find out the point where the intestine was ruptured, and if possible close the opening. The operation was performed by Dr. Varian, assisted by the Drs. Waid and the reporter; the external abdominal wound was easily separated, and the remains of the sac exposed; the sac was mostly obliterated, its opposite walls being in apposition and bound together by adhesions of newly formed tissue; projecting into the sac through the right wall, about an inch below the surface, and about midway between the upper and lower extremity of the external wound, was found a bone, which, being withdrawn proved to be one-half the lower jaw of the foetus; in this sac were other small pieces of bone, tissue with hair upon it, and food; at the upper right-hand corner of the sac was found an opening into a large intestine; the outer wall of this sac, through the integuments, was opened to the extent of about three inches, the incision being at right angles with the original

wound ; the epigastric artery was cut, and both ends ligated ; the opening into the intestine was large enough to admit two fingers ; it appeared at first as though the gut was cut across and ended in the sac, but by passing two fingers into the gut, in different directions, it was found that there was a wall between them ; the wall of the sac, and the adhesions of the intestine to it were broken down, the intestines drawn out, when a longitudinal rent, two and one-fourth inches long, with ragged edges, was found ; about the original seat of the ulceration the tissue was a good deal degenerated ; the edges of the wound were turned in, the peritoneal surfaces brought together and stitched with carbolized cat gut, the narrow cul-de-sac extending downward into the pelvis, spoken of the first operation, was not wholly healed, although partially bridged over, and in it was found broken down tissue, small pieces of bone, etc. ; it was cleansed, and a drainage tube inserted ; the external wound was brought together by silver ligatures ; the patient did not rally well, although she showed considerable strength a few hours after the operation, and died of shock and exhaustion six hours after being placed in her bed. It is safe to say, that had not this most unfortunate complication ensued, the patient would have recovered, for her rapid gain until this accident, and the almost entire obliteration of the large sac, warranted the first operation, which fairly may be said to be successful. Dr. White, Dr. Varian, and others, at the first operation, very carefully examined the sac before it was closed, and found nothing to cause them to think that any such complication as this was likely to occur ; this bone and other tissue had evidently been completely shut off from parent sac, and had formed, before the first operation, an entirely separate one of its own ; the great destruction and weakening of its walls, as shown by the profuse discharge and the contraction of the sac, so that its opposite walls had come together, on the one hand, and the firm adhesions of the intestines to the sac on the other had allowed the ends of the encysted bone to penetrate both the cavity of the parent sac and the intestine ; the great rent in the

intestine was caused, I think, by a weakening of its walls by inflammatory processes, for it had a red, turgid, "angry" look at the time of the last operation, and by the shrinking of the large sac, and the consequent pulling of the adherent intestine from its natural position, which had first forcibly torn the walls of the ulcer, and the contraction of the sac and counter-pulling of the intestines continuing, the large fissure was next made. It is safe to say, that had the operation been done when first advised in December, the patient would be alive to-day.

STRICTURA ILEI, LAPARO-ENTEROTOMY.*

REPORTED BY HERMAN MYNTER, M. D.

MR. M., 34 years of age; father is living; mother died in his childhood; has had healthy children; has not had venereal disease; always enjoyed good health; never suffered from any trouble of the bowels. His disease commenced about ten months ago, after having been exposed to inclement weather on a country-road; he was thoroughly chilled, which was followed by a severe pain in the abdomen, to the left of the naval. By the use of hot fomentations, rest and appropriate medication, the pain disappeared. Three weeks later the pain returned with hiccup and eructations. For several months the attacks returned at intervals of fourteen days, and were accompanied with meteorismus, borborygm and profuse vomiting, sometimes several quarts being vomited up. The borborygm increased in course of time, and at last became continuous. During his whole disease he suffered from constipation; cathartics generally increased the pain and vomiting; he diminished in weight about thirty pounds in half a year.

He consulted me the first time in October, 1879; he stated that the attacks now came on about every ten days, and were always accompanied with profuse vomiting, which gave great relief. The substance vomited was a sour fluid, followed by a yellow, extremely bitter fluid, and at last feculent matter. The

*Read before the Buffalo Medical Association.

borborygm was now always present, occurring every few minutes, and could be heard many feet away.

The abdomen was found slightly enlarged and tympanitic; enormous peristaltic movements were apparent through the abdominal wall; every few minutes a part of the bowels would become distended, and protrude as a tumor as large as a fist, and then slowly disappear with a loud gurgling sound. Most frequently it took place in the left iliac region. No tumor could be felt, and there was no pain on pressure. The examination of the rectum did not reveal anything abnormal; all other organs were healthy. My diagnosis was an internal constriction of unknown character. I advised discontinuance of all cathartics, absolute rest during the attacks, together with the administration of opium, appropriate diet and tincture of belladonna, (five drops four times a day). For two weeks he felt better under this treatment. I lost track of him until January 19th, 1880. He stated that during November and December the attacks increased in frequency; the vomiting occurred after almost every meal, and sometimes in enormous quantities, and of feculent character; he had occasionally evacuation of the bowels of soft character, without blood; the borborygm was constantly present; he had kept his bed for six weeks, and was now in a state of extreme starvation, with pale, cachectic color. The abdomen was so retracted, that the corpora vertebrarum and the pulsating aorta were plainly visible. The same abnormal peristaltic movements were seen, especially in left inguinal region, where a slight prominence of doubtful character was felt. The same gurgling sound was heard every few minutes, preceded by partial distension of the bowels. The patient, his family and friends, were aware of impending death, the attending physicians having declared the case hopelessly fatal.

After a consultation with Dr. Miner, who concurred in the diagnosis of internal stricture of unknown character, and considered, under existing circumstances, operative measures justifiable, and after explaining the nature and dangers of the opera-

tion to the patient and his friends, operation was determined upon. For three days pancreatic meat-solution was injected into the rectum, five ounces of meat being used every three hours, with ten grains of pure pancreatine. The injections were all retained and the patient gained in strength; five drops tincture belladonna were given every four hours; a movement from the bowels occurred the next day, of soft but natural character. The most important question, the seat of the stricture, could not be fully determined. A large-sized rectal bougie could be introduced its full length in the rectum, and felt in the left iliac region. The entire descending colon could be filled with water by injection, showing that the stricture was not near the rectum. Taking into consideration, that an almost natural movement of the bowels occasionally occurred, while the gurgling sound through the stricture indicated that only very thin fluids could pass the obstruction, I concluded that the stricture was far up, possibly near the cœcum, or in the ileum. If near the rectum, the patient in all probability would have had continuous diarrhœa, as the thin fluids would not have been absorbed before reaching the rectum.

January 23d—Operation under chloroform, Drs. Miner, Burwell, Tobie, Hauenstein, Lothrop and McNiell being present. The incision was made in the linea alba under antiseptic precautions, from the navel down towards the symphysis, and afterwards enlarged one inch upwards to the left of the navel. In the pelvic cavity, on the right side, a hard, solid stricture was found and brought out through the wound. It was about one inch in length, ring-formed, contracted, hard as cartilage; above the stricture the bowels were very much dilated, and the walls hypertrophied; below the stricture the bowels were collapsed and the walls thin and normal. The stricture had its place in the jejunum or ileum, where could not be ascertained. As the establishment of an artificial anus would be scarcely less dangerous, and in this case, if it should terminate in recovery, which was in the range of possibilities, would always be permanent, and as the resection of the

constricted part would be a very difficult proceeding, as one end was enormously dilated, the other very contracted, we resolved to establish a fistula between the bowels above and below the stricture. This was done about two inches from the stricture, the bowels being brought in parallel position, and first sewed together with six carbolized silk sutures for about one inch. On each side of and near to these sutures an incision was made in the bowels about three-fourths of an inch long, and the entire edges of the wounds were sewed together in a similar manner. The knots of the first sutures were in that way inside the bowels, the rest outside. In this manner the peritoneum was at every spot united with peritoneum.

The peritoneal cavity was well cleaned, the bowels repositied, and the wound united with six deep and several superficial carbolized silk sutures, and antiseptic bandage applied. The patient was very low after the operation, but towards evening had normal temperature and a rather weak pulse of 96. Opium in 20 drops doses was given every two hours; the following morning he felt comfortable, had no pain or tenderness in the abdomen; no meteorismus or vomiting; the borborygm had perfectly disappeared; the bowels moved; urine was freely evacuated. Pancreatic meat solution with whisky were given per rectum. He felt well till towards evening, when the pulse grew weaker and weaker, and he died about thirty hours after the operation from exhaustion.

At the post mortem examination, twenty-four hours after death, the wound in the abdominal wall was found partially agglutinated.

No symptoms of peritonitis present; the stricture was found about eight to ten feet from the pylorus, twelve to fourteen feet from the caecum. The stricture was formed by a circular ulceration, and did not admit the tip of the finger; no swelling of glands in the mesentery. The fistula was in such exact opposition, that when water, with a powerful syringe, was thrown into the bowels above the stricture, it passed the fistula without a drop coming out between the sutures.

A FRACTURE CASE

SERVICE OF DR. C. C. F. GAY.—REPORTED BY DR. F. PETERSON.

Editors Buffalo Medical and Surgical Journal:

GENTLEMEN.—Dr. F. Peterson, House Physician, has at my request kindly furnished me from the records, a copy of the following remarkable case, which was under my charge last year at the Buffalo General Hospital. It deserves prominent notice, since recovery from the severe and complex injury, has no parallel, I believe, in the records of surgery.

Yours truly, CHAS. C. F. GAY.

JOHN DEGENFELDER, entered Buffalo General Hospital, March 14, 1879; single; aged 18; was caught in belting and whirled several times around a shaft; injuries were as follows:

Fractured radius and ulna of right fore-arm at junction lower and middle thirds; fractured radius and ulna of right forearm at junction middle and upper thirds; fractured humerus of right arm at middle third; fractured clavicle of right side, near sternum; fractured femur of left side, comminuted.

Flesh wound exposing external hamstrings five inches in diameter. Wooden splints were applied to fore-arm after reducing swelling with hot fomentations. Swinburne's extension used on arm. These bones united in usual time; 2 inch shortening of humerus, and 1 inch of fore-arm; form of arm good. Compress and straps were put over clavicle; eight pounds extension applied to thigh; highest temp. 105.

April 21. Thigh swollen and fluctuating under pressure. Bistoury plunged in on outer surface, lower third, and one quart of pus was removed. Before next day two quarts more were removed. Whiskey, quinine and iron are his medications; Diet, milk, eggs, beef, beef-tea.

June 25. Still discharging several ounces daily of pus; femur seems to have united; pressure, by strapping, bandaging, wooden or tin splints tried; at one time seemed to have had pyæmia, pus-depot having formed in right arm, but ill omens soon passed away.

July 21. Put on plaster of Paris bandage.

Sept. 6. Able to drag himself over the building. Bones all united, but thigh crooked.

.Sept. 26. Uses crutches and walks everywhere; able to go down town; health good; discharge from thigh small, thin and watery.

Feb. 12, 1880. Is now at work.

TRANSLATIONS.

THE USE OF IODIDE OF POTASSIUM AND CALOMEL IN DISEASES OF THE EYE.

FROM THE GERMAN, BY LUCIEN HOWE, M. D.

TWELVE years ago Hennequin called attention to an acute inflammation of the eye, produced by the internal use of iodide of potassium, in connection with the dusting of calomel upon the conjunctiva. This effect was not then entirely unknown, having already been discovered thirty years before by Fricke, and verified by others, (Fretschi, Andreal and Edm. Rose) the inflammation being attributed to the peculiarly irritating action of iodide of mercury, which, according to chemists, must be formed on the conjunctiva under such circumstances. The author, by means of certain experiments on animals, and by chemical analysis, has considered the question carefully, and arrived at the important practical conclusion, that, the external use of calomel is to be avoided, whenever iodine is contained in the tears. For, when iodide of potassium is administered internally, it can in a short time—even in a few moments—be detected in the different secretions and excretions, and especially in the tears.

A dose of 0.50 centigrams, (grs. viii.) taken twice in twenty-four hours, is sufficient to keep it continually present in the tears of the human subject.

Now, although calomel is but slightly soluble in water, alone, it is much more readily dissolved in a solution of $\frac{3}{4}$ per cent. of common salt, and can consequently always be taken up by the

fluids on the conjunctiva. Therefore, when calomel is dusted on to the membrane, simultaneously with the administration of the iodide of potassium internally; iodides are formed which act as irritants to the conjunctiva, producing an acute inflammatory condition. (*Archiv für Ophthalmologie—Klinische Monatsblätter für Augenheilkunde.*)

[Note. Reference has already been made to this subject, by the writer, in a former number of the *BUFFALO MEDICAL AND SURGICAL JOURNAL*, vol. xv, p. 145.]

In a large class of cases—especially where phlyctenulæ appear on the conjunctiva or cornea—it has been customary to apply calomel in the manner indicated, and at the same time to advise the internal use of some form of the iodides. Only recently, however, have the details of the process been carefully studied and the action of the two agents fully demonstrated by exact chemical investigation. The evil effect of such a procedure, is however thus proved by chemical analysis, as it was before shown by clinical experience.

SELECTIONS.

BROMIDE OF ETHYL—THE NEW ANÆSTHETIC.

BROMIDE of ethyl or hydrobromic ether is a transparent colorless liquid, heavier than water, (sp. gn. 1.423). Its taste is sweetish and pungent, and its odor ethereal and not unpleasant. It is sparingly soluble in water, but mixes in all proportions with alcohol and ether. It is not caustic nor even irritant when compared with chloroform. Its anæsthetic action has long been known, but Dr. Lawrence Turnbull of Philadelphia, was the first to experiment with this ether upon man.

He publishes reports of twenty-one cases, and the advantages which he claims for this agent are: The rapidity of its elimination from the system by the respiratory passages; the small

quantity required, and the readiness with which anæsthesia is produced.

Dr. Levis, Surgeon to the Pennsylvania Hospital, and to Jefferson College Hospital, expresses himself favorably as to its use; he says, "I have now had sufficient experience upon which to at least base some very decided impressions, as to its value. Its vapor is quite unirritating to the respiratory passages when inhaled, and in this quality it has the advantage over both ether and chloroform. It seems to be entirely eliminated through the lungs, and in cases in which some secreting organs happen to be from disease incapacitated, it has in this regard a decided advantage as to safety over chloroform.

"Its principal physiological characteristics, which will concern the surgeon, are its rapidity of action and the quickness of recovery from its effects; as far as observed by me it does not influence the circulation, excepting to produce sometimes a slight increase in the rapidity of the heart's action and in arterial tension or pressure.

"The cerebral anæmia and the fatal syncope of cardiac depression, to which chloroform is liable, are dangers which do not appear to threaten in the anæsthesia of the bromide of ethyl; nausea and vomiting appeared to occur less frequently. The action is very rapid—complete anæsthesia is accomplished in one-third less time than is the case with chloroform; usually the pupils dilate during total insensibility; but soon contract if the administration is interrupted. The effect is transient, in a few seconds after removing the towel, the patient is able to talk intelligently, and in a minute or two can walk away without a stagger.

"The quantity consumed will depend upon the manner of using it. Dr. Levis' plan is to pour two drams of the ethyl bromide on a small napkin folded up to a space of about four inches, and then laid on another napkin folded so as to be large enough to cover the entire face of the patient.

"So powerful an agent as bromide of ethyl, should be used with caution—but the results of experience so far demonstrate that

it is a safe anæsthetic agent, quicker in action, more transient in effect—in some respects preferable to ether or chloroform.”

PECULIARITIES OF RINGWORM AND ITS TREATMENT.

In the *Lodon Lancet* for January, Dr. Liveing directs attention to the peculiarities of ringworm. He notes the prevalence of this disease in England and France, and its comparative infrequency in Germany. In ringworm of the scalp, which is far more important than that of the body, the diagnosis is often difficult. As to its communicability, he says it is so until it is quite cured; indeed as long as scurfy spots remain, even though the hair be growing freely, it may be propagated. It is far more contagious when it first appears before any remedies have been applied than it is while under treatment. The best remedy to prevent its spreading among children is the carbolized glycerine of the British Pharmacopœia, either pure or diluted with a little more glycerine; it should be well rubbed over the scalp every morning. This acts in two ways; (1) the carbolic acid produces its usual effect on organized matter; and (2) the glycerine prevents particles of scurf from being dispersed. In addition to this the carbolized glycerine has a distinct curative effect.

As to the treatment of this troublesome malady, the remedies may be divided into two classes: (1) those which act by setting up sufficient inflammation in the skin to lead to the destruction of the disease; (2) those of a milder kind which act simply as antagonistic to the development of the *Trichophyton tonsurans*. To the former class belong such remedies as acetum cantharidis and strong acetic acid; to the latter, sulphur ointment, the white precipitate ointment, and sulphurous acid lotion. Many remedies combine these two properties; as for example, chrysophanic acid ointment, iodine liniment and strong carbolized glycerine.

How is the choice to be determined between these and many other remedies. *Strong remedies* are always contra-indicated in very young children. A little tincture of iodine painted on

once a day for a few days, followed by the use of the white precipitate ointment is all that is necessary. In older children, stronger treatment must be used; it is very unwise to make a *large* sore place on the scalp, as it may give more trouble than the ringworm itself. If the disease is in the early stage, and consists of one or two circumscribed spots, cut the hair short all around the spots, and apply with a brush Costel's paste, acetum cancharides, or iodine liniment. A single painting with pure carbolic acid is thoroughly effective, but it is a strong remedy and gives some pain. It is very unwise to trust strong remedies in unskilled hands. When the disease extends over a large surface, use milder measures; as tincture of iodine of double strength painted on every day, followed if necessary by the nitrate of mercury ointment, diluted according to circumstances, or an ointment containing the red or white precipitate of mercury and sulphur, or the oleate of mercury (10 per cent). In certain cases goa powder, or chrysophanic acid ointment (thirty grains to the ounce) are very effective.

Ringworm is often associated with a generally unhealthy condition of the skin which is badly flourished. In such cases tonics, as iron and arsenic, are often useful. This is in accordance with the fact that many strictly local affections are influenced by general treatment.

TREATMENT OF ASTHMA BY POTASSIUM IODIDE.

EVERYONE knows how difficult it is to cure or even benefit the majority of patients who suffer from asthmatic dyspnœa, whether the asthma be chronic or symptomatic; many medicines have been proposed, but they have failed in their purpose, and have consequently fallen out of use. Prof. See, after a great number of investigations, has at last been led to adopt heroic treatment in nearly every case. He administers Iodide of Potassium at the outset of the disease, in a sufficient dose; that is, at least 1.50 grams, increasing it progressively, to 3.4 grams, and limit-

ing the use of the drug on the appearance of symptoms of iodism. It is found that in this way alone is the action of the remedy really effectual.—*Practitioner*.

TREATMENT OF WHOOPING COUGH BY ATROPIA.

BY ARTHUR WIGLESWORTH, L. R. C. P.

M. R. C. S., &C.

I was led to try Atropia by reading Trousseau's remarks, concerning the oftentimes beneficial results obtained from belladonna. The alkaloid, however, seemed to be more likely to prove useful; first, because of its unvarying strength; secondly, because the dose could be more easily regulated in consequence; thirdly, because it is nearly tasteless. I therefore chose the solution of the sulphate of atropia (B. P.), which contains 1-120th of a grain in each minim—a most convenient strength; and in every case directed that it should be administered in the morning fasting.

It required some little time to find out the average dose to begin with; but I now begin with 1-120th of a grain (or one minim in a drachm of water) in children from one to four years of age, either diminishing or increasing the dose as occasion dictates; and, except in very severe cases, only order it to be given once a day, but when the nightly paroxysms are very severe, I order half the dose to be repeated about an hour before bedtime.

The results that follow its administration may be summed up thus: first, a steady diminution in the *number* of paroxysms; second, a diminution in the *duration* of the paroxysms; thirdly, a change in the character of the "whoop," as if the vocal cords were not so closely approximated. Further, if the atropia is withheld, the beneficial effects derived from it, subside.

Now, these results follow more or less speedily the administration of the remedy and appear to depend upon the susceptibility of the patient to the action of the atropia. In a few cases

thirst may become a prominent symptom, which subsides, however, on the diminution of the dose. In only one case has the sensation of "falling down" been experienced, and this disappeared with a reduction in quantity.

I append a few cases, taken at random from details before me. In one, the remedy was commenced as soon as the characteristic whoop was definitely established, and the daily number of paroxysms ran up from eleven to twenty-six in four days; by that time the atropia seemed to have begun to act, and in fourteen days the number was reduced to two. In another case the number was twenty-four on the second day after the atropia was commenced and a similar decline took place. Again twenty-six was the number registered; in three days it had fallen to thirteen, remained stationary for a week, then steadily declined. In another patient, aged ten years, the cough was almost incessant: in a week there was no paroxysm to record. One case I should like to give more in detail: The patient, a little girl, aged five, had passed through a severe catarrhal stage, and the "whoop" had become well established, when she had a sharp attack of measles, but no diminution of the cough. The rash was nearly gone, when acute broncho-pneumonia of both lungs set in, dullness on the left side being well marked half-way up the lung, respiration twenty-five in a minute; dyspnœa urgent; recumbent position impossible; pulse 170; fluids could only be taken in single mouthfuls for want of breath. Each pertussal paroxysm caused the greatest distress. In this case, I ordered 1-120th of a grain of sulphate of atropia twice a day with the most satisfactory results. The cough became less frequent, and its duration was decidedly shortened and less violent. She was also ordered in the interval carbonate of ammonia and decoction of senega. Under this treatment, the child slowly rallied and is now perfectly well. A good example recently occurred in a family of a clergyman: three of the children being attacked with whooping-cough, coincidently with their neighbor's family,

with whom they played every day. In a month all trace of disease had left them, whilst at the end of two months their neighbor's children still had it.

Whooping cough is essentially a "neurosis," and if we are to judge from the sensations described to us by those who are old enough to analyze their feelings, it is the laryngeal branches of the pneumogastric nerve that are primarily affected.

Of all the drugs, there are none that have such a peculiar and special effect upon the pneumogastric nerve as belladonna, though it is by no means limited to that nerve. It is essentially a nervine sedative, and has a capacity for diminishing both sensibility and irritability when these are morbidly increased. Its primary effects are manifested upon the mouth and throat producing thirst. A further action is upon the laryngeal muscles, rendering articulation imperfect, or preventing it altogether. It is reasonable, then, to attribute the beneficial effects of atropia in whooping cough, chiefly to its effect upon the laryngeal branches of the pneumogastric nerve, diminishing its exalted sensibility and irritation which are known to exist, and which by constant propagation to the medulla oblongata, increase in that body the capacity for reflex phenomena. But it is also probable that atropia has a very decided effect upon the medulla oblongata itself, rendering it less capable of exciting reflex action. Dr. Kroon's experiments led him to the conclusion that valerianate of atropia had a very special and direct effect upon diminishing its inherent capacity for reflex phenomena.

I think then the conclusion is justified that by its action upon the pneumogastric and sympathetic nerves, and also upon the medulla oblongata, atropia relieves and ultimately cures the neurosis, called whooping cough; and that in those cases when, by idiosyncrasy or easily-excited sympathetic action, the intensity and severity of the reflex phenomena are greatest, the beneficial action of atropia will be more marked.—*London Lancet*, Aug., 1879.

THE TREATMENT OF PHTHISICAL COUGH.

AT the last meeting of the Ohio State Medical Society, Dr. Robert Bartholow read a paper on the Treatment of Phthisis, from which we extract the following remarks as to the means of relieving cough, often one of the most troublesome questions with which we have to deal in the treatment of phthisical cases.

"As cough prevents sleep, destroys rest at all times, and is exhausting, patients are clamorous in their demands for relief. The prescription of hydrobromic acid and spirits chloroform, proposed by Fothergill, is rather disappointing; gargling the throat with solution of potassium bromide allays the reflex excitability of the fauces, and thus lessens cough somewhat. But there are no efficient substitutes for the preparations of opium, and they must usually be prescribed when the cough is severe and persistent. The most generally useful of these is codeia, which is about one-half the strength of morphia. The superior virtues of codeia as a remedy for cough are these: it has a selective action on the pneumogastric nerve, allaying irritability of its end-organs; it is calmative and hypnotic, and as compared to morphia, is less excitant and less nauseant. Codeia may enter into extemporaneous combinations with atropia and other agents just as morphia does.

"Apomorphia now and then succeeds admirably in allaying cough, but it is useful in the *rôle* of nauseating expectorants, and is therefore not suitable in phthisical cases. When an irritable stomach co-exist with a teasing cough, oxalate of cerium acts surprisingly well. On the other hand, for the arrest of the reflex vomiting of phthisis which accompanies the cough, there is no remedy comparable to strychnia; when there is profuse expectoration, rather foetid in character (bronchiectasis), and indeed in ordinary cases with free expectoration, carbolic acid is often very beneficial. It may be given in cherry laurel water in the dose of half a grain three times a day. Besides its influence over cough in these cases, carbolic acid reduces the abnormal temperature, checks the sweating and improves the

bodily condition in general. In the more chronic cases of phthisis, with a less range of daily temperature and scanty expectoration, iodide of ammonium is specially effective. It is useful to combine arsenic with it, or it may be given in a mixture of wine of tar."

BALSAM OF PERU IN PRURITIS.

Dr. Auerbach has treated pruritis with this substance with the greatest success. It is well rubbed into the parts, and cure results in a few days.—*Deutsche Med. Woche.*

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, February 2, 1880.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

AFTER the transaction of a certain portion of the routine business, the essay for the evening was read by Dr. J. W. Keene, whose subject was "Cæsarean Section." The history of the operation was given in detail, and special attention called to the first authentic records concerning it, which dated from the latter part of the fifteenth century. Referring to the results as reported by different authors, he said :

"A summary of the various statistics at command gives a mortality of 52.8 per cent. This includes the results of both champions and opponents, and even the estimate of Boerhaave, that only one mother in 14 survives the operation, and also the statement of Velpeau, that in England, out of 15 or 20 cases not one at the time of his writing had been successful."

The Cæsarean Section was then compared with embryotomy and the question discussed as to which was preferable in cases

when mother and child were both living. The words of Osborn, Maureceau, Baudelocque and Smellie, were quoted as favorable to the former operation, while Caseaux and others were opposed to it. As usual, the advocates of the middle course, seem to be the wiser; a class, like Schroeder, prefer the Cæsarean Section, especially "when a living child can not be delivered by the natural passages, without sacrifice of its life and the mother desires the performance of the operation." Its general advantages were then pointed out by the writer who said, "we have to deal with healthy tissues in a reasonably healthy patient, and we always know what we shall find."

The special indications for its performance were when the fœtus could not be delivered alive or dead *per vias naturales*; surety in all cases where the smallest pelvis diameter is less than 15 lines, after rupture of the uterus, with cancer of the cervix greatly advanced, or when a mother volunteers to sacrifice her own life for the chances of saving the child.

In the discussion which followed:

Dr. Hartwig regretted that the writer could not fortify his statements by personal experience. As for himself he had on one occasion been obliged to attempt the extraction of a child from the uterus of a woman suddenly deceased, this being required under such circumstances by the laws of Germany, where he then resided. At that time he was surprised by the abundance of the hemorrhage, and thought some procedure might be adopted to prevent the entrance of the blood into the abdominal cavity. It would seem advisable to him, under such circumstances, to unite the walls of the uterus to the edge of the incision in the *linea alba*, by means of a few elastic stitches, and after that to proceed to the removal of the child.

Dr. Mynter thought that the results thus far reported from the operation of gastro-elytrotomy were so encouraging as to make it in every way preferable to the Cæsarean section. A brief review was given of the manner of procedure adopted by Professors Skene and Thomas, from which it appeared that the

external incision was similar to that made in ligating the iliac artery, that through this the vagina was opened and the child brought into the world over the brim of the pelvis.

Dr. Kilburn called attention to a tabulated list of cases prepared with great care by Dr. Harris, of Philadelphia, which showed a total mortality to the mothers of about 56 per cent.

Under the head of voluntary communications Dr. Mynter read the history of a case of intestinal obstruction, which he attempted to relieve by an operation, and accompanied the paper by the presentation of an interesting post-mortem preparation. (See Clinical Reports.)

The case was discussed at some length by Drs. Keene, Hartwig and others, after which the Association adjourned.

EDITORIAL.

THE UNIVERSITY OF BUFFALO.

THE MEDICAL COMMENCEMENT.

THE winter season of the Buffalo Medical College closed with unusually interesting exercises, which was made the occasion to invest a class of fifty-six graduates with the degree of Doctor of Medicine. Not only here, but elsewhere, the season has yielded an abundant harvest of candidates for the labors and the honors of the Medical profession.

The fact is significant, however, in the experience of the present session, that the higher standard of requirements for graduation and the increased facilities, with the lengthened term of lectures, afforded for acquiring a theoretical and practical knowledge of the science of medicine, have met an emphatic endorsement by the profession.

We desire, especially, to direct attention to this important result. The leading medical schools are extending their lec-

tures, and establishing a graded curriculum of study with regular and frequent examinations. The discussions of late upon the subject of medical education, and the favorable action of medical societies have imparted an unusual impetus to this important movement. The authorities of the Buffalo Medical College, composed of our most progressive men, we think acquiesce heartily in this improved sentiment. The result, as unfolded during the last session, justifies the profession in extending its approval and support to this and other institutions, whose aim it is to meet the demand for a higher standard of medical education, and thus, to prove faithful custodians of the trust committed to them in granting medical degrees.

The agitation and discussion of this question places the future status of the medical profession, where it justly belongs, (1) upon the members of the profession in their choice of students, and (2) upon medical colleges in affording ample facilities for clinical and didactic instruction, and in exacting a rigid examination on the basis of the higher standard of requirements, which it is their purpose to establish.

Such evidences of liberal and progressive ideas and efforts prevailing throughout the country in behalf of the most important interests of the profession, plainly demonstrate that the present decade will do much in the solution of this hitherto intricate problem. We are not less ambitious than the authorities to which the Buffalo Medical College is intrusted, that they should be, in the future as in the past, in the vanguard of medical reform. Every movement in advance is met by a generous response and support. The late commencement was a most flattering exhibition of its power and influence. The alumni, old and new, are highly creditable representatives of the profession and of their Alma Mater.

The position of the JOURNAL upon this and kindred questions, affecting the present and future of the medical profession, will be that of earnest advocacy of every step in advance, and of approval of whatever concerns such vital interests as that of medical education.

VITAL STATISTICS OF BUFFALO.

The medical profession of this city is to be congratulated upon the zeal and industry which has recently been exhibited by its Board of Health. The gentlemen, lately elected to that position, have evidently entered upon their duties with a realization of the responsibilities attending it, and their efforts even thus far, in behalf of sanitary science, can not be too highly appreciated.

A "statement of mortality" is now sent weekly to every physician in the city, and this report is so much more complete than any formerly furnished, as to be deserving of special praise.

The vital statistics are here presented under different tabulated heads, in such a manner as to be very convenient for reference or special duty.

The general plan of the report is similar to that proposed by the National Board of Health, with some minor modifications suggested by our city physician, Dr. A. H. Briggs.

The causes of death are arranged in six classes, which are subdivided into forty-nine sections. The first of these classes includes the zymotic diseases and is composed of sixteen sections, representing as many different affections. These are also so arranged as to show the number of deaths from each disease in each of the different wards of the city—an advantage plainly evident in case of an epidemic of any kind.

The second class includes the "constitutional diseases;" to the third belong the "local diseases" of the system, etc., etc. Moreover, these are so tabulated as to show the approximate age of the deceased, together with the color, sex and social relation.

In other tables can be found the deaths reported in public institutions, and the births, marriages, and still-births during the week, while on the fourth page there is a summary of the daily meteorological observations, furnished for the same period from the office of the signal service.

Lithotomy; George W. Reynolds, Lockport, N. Y., Infectious Diseases; Charles Anthony McBeth, Tonica, Ill., Ovulation; William Henry Allen, Waverly, N. Y., Scarlatina; Adelbert Theodore Bacon, Canaseraga, N. Y., Acute Gastritis; William Robertson Campbell, Trumansburg, N. Y., Dropsy; Eddy Smith Freeman, Middleport, N. Y., Spermatorrhœa; Teneyck Olmstead Burleson, Howard, N. Y., Amenorrhœa; Marcus Abner Dumond, Danby, N. Y., Typhoid Fever; Joseph Robert Love, Buffalo, N. Y., Philosophy of Practical Medicine vs. Empiricism; Myron Smith Watkins, Spencer, N. Y., Diphtheria; John Park Mason, Elmira, N. Y., Puerperal Eclampsia; Ransom Elbert Moss, Gowanda, N. Y., Acute Pneumonia; Frank Brockway, Cambria, N. Y., Dysmenorrhœa; Kay A. Sweet, Bradford, Pa., Gonorrhœa; Alfred Beers Kibbe, Buffalo, N. Y., Color Blindness; William Richards Laird, Trumansville, N. Y., Accoucheur; Edward Clark, West Seneca, N. Y., Fractures of Shaft of Femur; Adoniram Jay Kniffen, East Saginaw, Mich., Gonorrhœa; John Anthony Hoffmeyer, Buffalo, N. Y., Treatment of Phthisis Pulmonalis; Charles Menzies Briggs, West Macedon, N. Y., Physiology of Rest in Health and Disease; Samuel Henry Warren, Buffalo, N. Y., Sciatica; Alfred Milton Mead, Macedon Centre, N. Y., Urinary Examinations; Pardon Leland Kimball, Jamestown, N. Y., Scarlatina; Morris Pierce Pomeroy, Grand Rapids, Wis., Typhoid Fever; Vernon Mark Griswold, Cassadaga, N. Y., Inflammation; Carl Bronson Smith, Painted Post, N. Y., Operative Surgery; Cassius Oresta Jackson, Canandaigua, N. Y., Digestion; Fremont C. Knight, Arcade, N. Y., Persons Found Dead; Benjamin Daniel Collins, Suspension Bridge, N. Y., Pleuritis; Charles Gordon Champlin, Williamsville, N. Y., Pulmonary Tuberculosis; Clarence Eugene Griggs, Strykersville, N. Y., Scarlatina; Mary Jane Slaughter, Scottsburgh, N. Y., Morbus Coxarius; Otto Appley, Damascus, Pa., Rubeola; Charles Dallas Shumway, Watertown, N. Y., Amenorrhœa; Carl Henry Guess, Buffalo, N. Y., Heart's Action; Frank Owen Vaughn, Buffalo, N. Y., Venereal Diseases; Fred Emerson Tuttle, Cassada, N. Y., Remittent Fever;

We understand that efforts have been made by the Health Physicians in former years, to compel greater exactness in the recording of vital statistics, and then to report these in a convenient form to the profession, but unfortunately such proposals did not find favor with the other members of the Board of Health at that time.

But the present city physician has come into office full of enthusiasm for the work, his suggestions are duly weighed by intelligent men with whom he is associated, and as a result, we already see evidences of an interest in sanitary science, which has not formerly been manifested.

This whole subject of vital statistics is of such importance as to demand a more extended notice than can be given it at present. In the future we shall attempt to call attention to other reforms much needed; but at this time we only wish to commend the Board of Health for the action already taken, and assure them that all such efforts will meet the hearty approval of every intelligent physician in the community.

THE THIRTY-THIRD COMMENCEMENT OF THE BUFFALO MEDICAL COLLEGE.

THE Medical Commencement was held Wednesday evening, February 25, at St. James Hall, and was attended by a large and appreciative audience. Prof. Thomas F. Rochester gave the address to the graduating class. His subject, "State Medicine," was exhaustively treated, and its discussion added much to the scholarly reputation, already acquired by the speaker, both at home and abroad. We hope to give abstracts from this valuable paper in a future number of the JOURNAL. President Anderson, of the Rochester University, addressed the Alumni.

We give a complete list of the graduating class:

Clayton Moses Daniels, Buffalo, N. Y., Management of Natural Labor; Henry Warren Rogers, East Aurora, N. Y., Median

Maltine deserves to stand in the front rank of constructives; and the constructives, by their preventive, corrective and curative power, are probably the most widely-useful therapeutical agents that we possess.

REVIEWS.

A Manual of the Practice of Surgery. By W. FAIRLIE CLARKE, Assistant Surgeon to Charing Cross Hospital. From the last London edition, Revised and Edited, with additions, by an American Surgeon. New York: William Wood & Co. 1879.

Webster defines a manual as a small book, such as may be carried in "the hand or conveniently handled." In that sense it may be used as a small and convenient book of reference. It does not contain anything in its 300 pages (covering the whole of surgery), that has not been said better and clearer in other books of surgery. Some common prescriptions, and a few recipes for the making of chicken broth and jelly, beef tea, etc., are added which do not make the book much more valuable. M.

Lectures on the Diseases of the Nervous System. By Professor J. M. CHARCOT. Translated from the Second Edition by GEORGE SIGERSON, M. D., M. Ch. Philadelphia: Henry C. Lea.

Any one who has listened to the eminent author of these lectures would readily recognize their general tone, even if the words were ascribed to another person. Charcot's style is as strongly marked in his writings as in his person. There is something rather impressive in the quiet way in which the propositions are stated, and in the judicial fairness with which the conclusions are drawn; while the clearness in presenting the positive knowledge in this obscure department of medicine, is delightfully refreshing.

It would evidently be impossible to condense all the facts relating to the pathology of the nervous system into the two

hundred and fifty pages here offered to the student. The general features of the subject, however, are well mapped out, and certain portions, especially the diseases of the spinal cord, are treated in a most exact and original manner. The disorders of nutrition, paralysis, agitans and disseminated sclerosis are considered at length, and five entire lectures devoted to hysteria in its protean forms. These are all clinical lectures in the real sense of the word, and as such contain the very gist of what a practitioner cares most about knowing,

H.

Atlas of Human Anatomy. Illustrating most of the Ordinary Dissections and many not usually practiced by the student, accompanied by an explanatory text. By RICKMAN JOHN GODLEE, Assistant Surgeon to University College Hospital, Senior Demonstrator of Anatomy in University College Philadelphia: Lindsay & Blakiston.

The third part of this excellent work has made its appearance. It is illustrated, as the two former parts, with four plates, each containing several figures. Plate 1 contains three figures, showing the ordinary dissections to expose the pterygo-maxillary region, and the carotid artery. Plate 2 (10) illustrates in five figures the anatomy of the nose and the neighboring parts. Plate 3 (11) contains in two figures the dissections usually made to expose Mechel's ganglion and the otic ganglion. Plate 4 (12) contains a fine view of the folds of dura mater, with the cranial nerves and intracranial arteries and veins, and several dissections of the orbit. The whole is accompanied with a full explanatory text. The entire work will constitute a perfect and unequalled anatomical atlas, as valuable for the surgeon as for the student.

M.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M. D., F. R. C. P., &c. Third American Edition. With Notes and Additions by ROBERT P. HARRIS, M. D. With two plates and one hundred and eighty-nine illustrations Philadelphia: Henry C. Lea 1880.

This work of 650 pages, written by a President of the Obstetrical Society of London, is one which bears the stamp of a mind

thoroughly acquainted with the subject. It is not a simple compilation, but on the contrary a thorough digest. It is particularly rich in its illustrations, these being both copied and original, and serving greatly to elucidate numerous points. While exceedingly pleased with the whole work, we wish to particularly notice that his views, regarding the frequent use of forceps, correspond with the modern practice, as well as with the conclusions arrived at during a recent discussion upon the subject by the noted obstetricians of Great Britain. It seems now no longer to admit of argument that the forceps in skillful and careful hands is an instrument of which we have long been too fearful. The work is fully up to date and amongst other recent additions contains a chapter upon transfusion. We highly recommend it to students and practitioners.

V. P.

Photographic Illustrations of Skin Diseases. By GEORGE HENRY FOX, A. M., M. D., Clinical Professor of Dermatology. New York: E. B. Treat, No. 805 Broadway. Parts 5 and 6.

Part 5 contains photographic plates of eczema infantile; eczema papulosum; eczema ichorosum; eczema pustulosum, and eczema squamosum.

Part 6 illustrates eczema barbae; eczema manum; eczema e venis varicosis; ulcus varicosum, and psoriasis annulata.

The author justly says in the preface that "the study of skin diseases without cases, or colored plates, is like the study of osteology without bones, or the study of geography without maps." The profession have so few opportunities to study these diseases in their practice, that plates, prepared with accuracy and skill, constitute an indispensable auxiliary, long needed, and here most successfully accomplished. We can conscientiously recommend these works of Professor Fox. The profession will thoroughly appreciate such helps to the study of a class of disease, otherwise difficult and obscure.

L.

A Treatise on the Theory and Practice of Medicine. By JOHN SYER BRISTOWE, M. D., F R C. P., Senior Physician, St. Thomas Hospital, etc., etc. Second American Edition Revised by the author, with notes and additions by JAS H. HUTCHINSON, M. D., Physician to the Pennsylvania Hospital, Philadelphia Philadelphia: Henry C. Lea. Cloth, \$5.00; Leather, \$6.00.

The first edition of this great work of Dr. Bristowe, published in 1877, received the hearty commendation of the American medical Press, and it has been quite extensively adopted as a text book in American Medical Schools. The new edition is a portly volume of nearly 1100 closely printed pages. A chapter on insanity has been added, and the author has made such corrections and additions to the body of the work as seemed advisable in the light of the latest experience. The reader will find every conceivable subject connected with the practice of medicine, ably presented in a style at once clear, interesting and concise. The additions made by Dr. Hutchinson are appropriate and practical, and greatly add to its usefulness to American readers.

D.

A Clinical Treatise on Diseases of the Liver. By Dr. FRIED. THEOD. FRERICHs. In three volumes. Vol. I. Translated by Charles Murchison, M. D., F. R. C. P. New York: Wm. Wood & Co., 27 Great Jones street, 1879.

The first chapter on the *Historical Account* of disease of the liver is full of instruction and interest, suggestive of the great change of views which have taken place as to the nature of most all diseases. This first chapter gives the history of the physiology of the liver, and of the pathology of this organ with the present condition of our knowledge, and new questions for investigations, with most important literature on the subject, and is so full of suggestions and instruction as to commend the work to the careful attention of the members of the profession, old and young; old, because of the crude and untenable opinions they have entertained; young, because of the present views, now so fully demonstrated to be correct. All the other chapters are of equal interest.

J. F. M.

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ORIGINAL COMMUNICATIONS.

STATE MEDICINE.*

BY THOMAS F. ROCHESTER, M. D., PROFESSOR PRINCIPLES
AND PRACTICE OF MEDICINE.

ONCE every year there are gathered together in this hall a pleased and ambitious class, who, having passed the requisite examination, receive from the proper authority the degree of Doctor of Medicine. This is attested by a legalized document, called a diploma, which certifies that the individual whose name it bears is authorized to practice medicine, and to perform surgical operations. Is this its only significance? It is hoped not, as the speaker will endeavor to show, not only to the class, but also to the audience, whom he addresses over their heads. He has selected as his topic, State Medicine, a theme which is as important and as intelligible to the one as to the other. It is not clothed or hemmed in by any technicalities, and is readily comprehended by every person of reasonable information. It is by no means confined to the domain of medicine, it is intimately affiliated with law and depends greatly upon the moral

*Abstracts from an address to the graduating class of the Medical Department of the University of Buffalo, Feb. 25, 1880.

teaching and support of religion. The learned professions all walk within its circle, and never collide. It is not, however, limited to these professions. It embraces much that pertains to science, art, invention, labor and to national, state and municipal authority. It may be broadly defined, as that science which aims to prevent, remove or mitigate the action of all agents tending to impair health, shorten life, affect the intellect or degrade the moral sense. It is in truth mental or physical sanitation, the former being greatly dependent on the latter, as evinced by the numberless agencies which dethrone the reason and which is restored to its balance and power, chiefly by hygienic appliances, and by the removal of the individual from his customary surroundings. Never was there a truer maxim than the trite one of "*Mens sana in corpore sano.*" The old idea that mind was something independent of matter, is no longer tenable, and the psychologist of the present day is not a theorist or rhapsodist, as were his predecessors, but of necessity a physiologist and pathologist, who reasons from material principles and facts, and makes his deductions from established bases. This illustration of cause and effect is here introduced to indicate what kind of argument is to be presented for your consideration, the more so as mania was formerly regarded as occult and mysterious, and even a wrathful visitation of Divine Providence, now happily rescued by science from any such unnatural and unjust imputation. It is, moreover, one of the proudest trophies of the domain of state medicine, for as yet, in nothing has it been of such signal service as in improving the treatment of the insane. No school of medicine is complete that has not its psychological department, and such it is hoped will be founded this year in the University of Buffalo, now that our city contains an ample and most perfect asylum.

It is the boast of the present century that human life is growing longer, and this is attributed to the effects of an advancing knowledge of many morbid influences and the consequent avoidance of the same as far as is possible and practicable.

And yet, while this is true, there are perils developed and fostered by the very agencies which are intended to be sanitary, and which are so when properly managed and directed. As an illustration, take the matter of drainage. Not so very long ago many diseases were claimed to be intensified and even originated by certain agents upon and within the ground, and the remedy indicated and demanded was drainage. Sewers were constructed and now the same disorders are ascribed to sewer gas. Admitting that this may be in part true, it does not disprove the former assertion. It only shows that the process has not gone far enough. It remains to destroy or remove the pestilential gases by action upon them within the sewers, and not only this, but the solid and fluid contents of the sewers should be discharged into reservoirs, and there disinfected before being allowed to pass into any stream or water-course. This is now being done most successfully in England, and the solid residuum, after being rendered innocuous, commands a high price for enriching soil employed for agricultural purposes, the disinfecting and purifying agents being a mixture of sulphate of iron and sulphate of alum, the cost of which is so trifling that it adds but very slightly to the expense of the mechanical apparatus and manual labor required. With our municipal authorities this should especially be borne in mind at the present time, when after much discussion and opposition the much needed Bird Avenue sewer is in process of construction. Not only should all public, but all private drains be well ventilated, and the gases carried far above all usual habitable elevation. This is easily done in private houses by having the water-conductor empty into the sewer, creating during rains a powerful wash-out, and at other times a passage for gases at least as high as the eaves. Besides this every trap should be ventilated by pipe communication with a chimney flue; for a water trap, be it ever so tight and well constructed, does not absorb and hold the noxious emanations of the drain. When this cannot be done, permanent washstands, closets and bath tubs should be dispensed with. Many an insid-

ious disease and low fever can be traced to the so-called modern improvements. The water trap may deodorize but not destroy, and thus render the more dangerous that which the sense of smell cannot detect and therefore guard against. A good thing should not be condemned, however, because it has imperfections; these will always be detected and corrected. Ancient Rome had abundant public baths and magnificent sewers, the latter still extant, and they elicit the wonder and admiration of the modern beholder. Yet Rome was, and is, one of the unhealthiest of cities; but, on the other hand, look at Paris and London, especially the latter, those great hives of human beings, formerly very pest holes, now perhaps the most salubrious cities on earth, and made so by their drainage. London was a bed of malaria, and hundreds of its citizens yearly succumbed to its deadly effects, among others the great protector, Oliver Cromwell. Rome was made only less unhealthy, but Paris and London were sanitarily-revolutionized.

In this connection it seems appropriate to consider briefly water supply. It has been demonstrated often and in many places, all over the inhabitable globe, within the last quarter of a century, science being the investigator, that the clear and sparkling spring, and that the deep well with its fountain of cold, bright and inodorless water, often contains and disseminates poison more deadly and rapid than those sown and distributed by the demon of alcohol; and this especially within the confines of cities and villages and more rarely on isolated farms. Let not our good temperance friends stand aghast at this declaration. Water is intrinsically healthful; alcohol intrinsically the reverse; but the former, under certain circumstances, becomes contaminated by disease germs which it distributes. The speaker here referred to Dr. Flint's observations thirty-five years ago. Since that time many observers have given to the medical world indisputable evidence of typhoid water contamination and distribution, and lately none more notably and positively than Prof. E. S. Van de Warker of Syracuse, who shows in the *Popular*

Science Monthly of 1879, how through one person seventeen others became ill from a well poisoned by want of proper drainage in its vicinity. But it is proper to state here that typhoid fever will never emanate from water supply, however foul and impure, unless the special typhoid germ is conveyed to it, and also to state that no water, however pure, may not be made a vehicle for it; and this is adduced as an argument, if such is needed, for thorough and efficient drainage, which may be made so complete as to do away with soil saturation. The wells of this city were many of them examined within two years by a competent chemist. The water of very few of them was suitable for drinking purposes. They were subject to soil saturation; this does not mean that drains or vaults emptied into them directly or indirectly, although even such accidents have happened; it means the reception of improper material by percolation through the soil. This was shown by the excess of chlorine and of albumenoid ammonia, in many instances being considerably more than that found in sewer water itself; and yet to a casual observer this water was clear, cold, tasteless and inodorless. That these wells originate many diseases and aggravate more there can be no possible doubt. Prof. Breneman of Cornell University, on this subject says: "It shows the extent of soil saturation and indicates the condition of the ground, the emanations and exhalations from which taint the air in which the families are obliged to live, and expose them to a constant morbid agency." For this the only remedy is drainage; and the drain? Ventilate it, wash it out often, and when it discharges its contents, disinfect them and make some portion useful, and carry off the remainder, now made harmless by artificial or natural channels. Cold and deep and rapid as is our noble Niagara, it should not be tinctured with any uncleansed scourgings. At one time, but a few years back, our reservoir received a percentage of the outpouring of the canal and harbor. Various intestinal troubles were very prevalent. Now the tunnel has been carried far out into the stream, and these disorders are relatively rare.

At one of our anniversaries, some time ago, the speaker dwelt at some length upon the heating, lighting and ventilation of dwellings, churches and public schools, it is believed, with good effect. Similar appeals made here and elsewhere by various persons, called public attention to many unsuspected evils, which are now either removed or are in process of correction. It is not proposed to go over this ground again, except to say that in the residence, sanitation in the cellar and bedroom are of paramount importance.

Certain mortuary practices exist which demand strict inquiry and limitation. Reference is made to ice surrounding and so-called embalming of bodies. These are both to be commended under proper restrictions and limitations, but without them, as now practiced, are utterly wrong, may be life-destructive, and in conflict with necessary judicial inquiry. They should never be used except with the knowledge and consent of the attending physician; yet how rarely is this the case. No one can decide upon the reality of death, or of its probable cause, but an intelligent and educated medical man; but often his opinion is not asked. The patient whom he last saw living is enclosed in ice at his next visit. Who knows that the frozen and lifeless body was not in a state of syncope or trance. There is no excuse and no necessity for this indecent haste, and the undertaker who counsels and practices it, may be the cause of the death which he presumptuously assumes has taken place. Embalming, which consists of injecting arsenic and other antiseptic agents into the system, still less should be practiced, without competent medical authorization. It interferes most seriously with all subsequent pathological research, and may cover up crime and prevent the detection and punishment of its perpetrators. No chemist can determine the question of poisoning when this operation has been made. Had Hotchkiss been "embalmed" Lewiston and Lockport would have escaped their present excitement. It is said that the New York Medico-Legal Society has taken up

this matter and is initiating steps to regulate this process by much needed legal enactment.

All of you remember the fearful visitation of the south and southwest, by yellow fever, two years ago. It caused the appointment of the National Board of Health, and last year the wisdom of the creation of such a body was demonstrated by the limitation of the pestilence to sadly unfortunate Memphis. Through its advice the most rigid quarantine was enforced in and about the disease-infested and beleaguered city, and the result was that the plague was fenced in, and yet the year before, when quarantine was advocated at the meeting of the American Medical Association, at Atlanta, the proposition was most violently opposed by the medical men present from New Orleans. Last summer's experience ought to, and probably will, silence such hypothetical and factious resistance in the future. This Board has now in contemplation another step striking at the very root of the matter. It proposes to destroy the disease at its birth-place by coöperating with the Cuban authorities in cleansing and disinfecting the harbors of Havana and contiguous ports. The experiment is one of great magnitude, and will be watched with absorbing interest. If successful, it will save yearly thousands of lives and promote commerce enormously, and will cause similar procedures to be adopted in many West Indian and South American seaboard cities. Cholera, which has heretofore been considered a mysterious emanation from the jungles of Burmah and Siam, is now thought to be due to the impure water employed for drinking; and the British Government, always foremost in sanitary reforms, has appointed a commission to investigate the grounds for this assertion which, if found to be true, will open the way for avoiding one of the most terrible scourges of the human race. But while attention is given to these fell giants of destruction, all communities should be taught that many disease-fostering and developing agencies are entirely under individual and corporate and municipal control. Slaughter-houses should never be

allowed to contaminate the air and the soil of city or village. How completely this can be prevented; witness the immense cleanly and inodorous abbatoirs of Paris, where no blood or intestinal products become sources of pollution, where everything is either destroyed or made useful in art or agriculture. Still less should large numbers of animals be congregated in confined quarters for sale or for feeding and fattening, as is done in this and other cities. Within the year an enormous pigstye attached to a grape sugar factory, in a thickly populated quarter of Buffalo, offends the nostrils and jars upon the ears of all in the vicinity. Such nuisances should not be tolerated in any civilized community. If not positively unhealthy, they are certainly very objectionable, and the fat, soggy pork produced by such stuffing is presumably not of the most nutritious or palatable quality. It is well known that a certain proportion of hogs are the subjects of a parasitic microscopic disease caused by the *trichina spiralis*, which is produced and reproduced in great numbers and is found in all parts of their bodies. It is very tenacious of life and is not destroyed by smoking or pickling, and when cooked, only by long continued and extreme heat. The rat is the habitat of the same parasite, and it has been suggested that it is conveyed to the omnivorous swine by eating these pests. The *trichina* has been found in clean, isolated and well fed hogs, but it is probable that the larger number infected are from the animals fattened in connection with distilleries and grain product factories, where the rat is always in great numbers. The hog does not appear to suffer from the parasite, but it produces in the human being who eats of his infected flesh, blood poisoning and low fever, attended with very large mortality. The deduction from this is very clear. No fresh pork should, under severe penalty, be passed into the hands of dealers without an inspection certificate that it is free from *trichina*. The inspectors should be appointed by proper authorities; any intelligent person with fair eyesight can discharge the duty—a barbed hook and a cheap microscope being the only requisite appliances. But meat inspection should not

be limited to pork. We all know by report at least, of the Texas cattle disease and of epidemic pleuro-pneumonia. Animals thus affected, die or are killed and some of their carcasses are destroyed, but it is to be feared that many of them find their way to the stalls. The flesh of healthy cattle that are overdriven, or worn out by long railway travel without suitable supply of water or food, or that are much bruised or trampled upon, does not keep well, and yet a great deal of this is sold, who can say at what cost of human suffering and sickness. There are in most cattle yards regulations to prevent these evils, and there are city ordinances to the same effect, but rarely are they enforced, and rarely are the penalties for violations inflicted. Under this head comes the consideration of milk supply, especially of cities. The proverbial pump dilution is not altogether a question of dollars, if what has already been said about city wells is borne in mind.

In examining the last annual reports of the various city and State Boards of Health, we are struck with the marked increase in the variety and value of their contents. The contributions cover an unusually wide ground and show that sanitary science can be brought to bear not only upon social and economical, but even upon literary and artistic matters. At the present rate, indeed, hygienic law and studies will soon interpenetrate every phase and period of a civilized man's existence. The State sanitarians have already struck at the very beginnings of life. They have introduced themselves to the infant and have mingled with scientific data the uncertain joys that attend his growth. The last Massachusetts Report proposes that the puerperal woman be at once supplied with printed forms upon which to record the physical condition and progress of her offspring. Such a plan, it is stated, has been in existence for some time in certain European cities. As the future citizen develops, his course is attended with a constantly increased watchfulness, a watchfulness that does not forget the collection of the more abstruse scientific facts. Nearly every State Board

has examined the school houses, and has recommended, or caused to be adopted, properly ventilated rooms. The school-boy is given 250 cubic feet of air where he used to have 25. His eyes are examined, his shoulders kept back and the light thrown in from behind. In Boston the boys and girls have been subjected to anthropometrical investigation, and charts are given, showing how fast the children grow under the high intellectual tension of that city. In the report of the Wisconsin Board is a valuable paper upon the proper reading for the young; nor upon perusal can we do else than believe that State advice and even State regulation is greatly needed in this direction. The class of literature which includes such works as the Half-Dime Novels, works which have the odor and suggestion of an intellectual emesis effects in time quite as much physical evil as imperfect sewers. It is evidence of breadth of view and earnest purpose that scientific bodies speak authoritatively for the State on such subjects. It has from the first been a prominent purpose of state medicine to protect children from the contagious diseases to which they are subject. With each year more potent methods of prophylaxis have been devised, and their application has been more widely urged. The recommendation for the prevention of scarlet fever and diphtheria issued by some of the Boards, and we may refer particularly to those of Massachusetts and Wisconsin, have been valuable additions to medical science. They have been widely circulated, and, as is shown by many letters in regard to them, have excited much interest among the people. This has in turn reflected upon the State Boards; it has made them more popular, and the local town and city Boards more numerous. In Massachusetts sixteen of the nineteen cities, and three hundred and one of the three hundred and twenty-five towns, have organized local Boards of Health, and these make regular reports to the Central or State Boards.

There is, however, no single direction in which Sanitary Boards have made more important advances than in those of vital statistics. The collection of such information is a compara-

tively recent undertaking in this country, and, as would naturally be the case, has been attended with much difficulty. A busy and practical people cannot easily be made to see the importance of registering every birth, marriage and death. Nevertheless, a foothold has been gained, the sentiment is becoming favorable to such registrations, and already even in some of our Western States very full reports come in each year. We have learned even thus soon, through this work, something of the way in which our nation is growing. Some of the facts have an especial interest to medical men. It is shown that the birth rate among our native born population in the cities is approximately only 16.74 per thousand, while that of the foreign born citizens is 35.23 per thousand. This birth rate for native Americans is even smaller than that of the French in France. Physicians know best, perhaps, the true "inwardness" of this state of things; and as regards remedy, although clergymen can preach and statesmen legislate, it is the medical profession, that can be of the more direct use in educating people to the beauties of a larger domestic circle, or, at least, in discouraging the means for limiting it.* Can this be true, oh! men and women of America? Is the seed of the foreign born to crowd your scanty progeny to the wall? Is your manhood failing, and are your motherly attributes perishing? Is the hearthstone to become cold, and are the attractions and attachments, and the moral influences of a large home circle to be dispensed with? If so, oh! pity for our people and our nation, and infamy and ruin here and hereafter for those base creatures who disgrace and degrade and dishonor the noble profession of medicine by lending themselves to the furtherance of this terrible iniquity. It is unnecessary to speak more plainly or more at length upon this subject, except to say, if there be one field for reform that is larger and more urgent than others, it is this, this reckless and careless and disgraceful, self-willed, selfish native depopulation and consequent demoralization.

* N. Y. Medical Record.

And now, members of the graduating class, and kind friends here present, who have come to see you enter upon your professional path and to wish you joy and success in your career, is it necessary to demonstrate further that much of your usefulness, if you aim to be really beneficial to the world, lies outside of the employment of drugs and surgical appliances? The very fact that you are physicians, places you in the van and will cause you to be consulted in all matters pertaining to sanitary procedures. It is your duty to see that you are fit for and can hold that position, attributed to you by virtue of your profession. To do this you will find it necessary to enlarge your reading and expand your thoughts. You must investigate to a reasonable extent much that pertains to various arts and sciences, to agriculture, to mechanical and hand labor, to topographical and meteorological conditions and phenomena. In short, you must devote much of your time to what is perhaps erroneously termed extra professional study and investigation, and this will repay you in more ways than you perhaps imagine. In the first place it will give you the personal delight of increased knowledge, it will give you ~~depth~~ and breadth, and expansion of thoughts and of ideas. It will make you searching and yet more charitable in your observations. It will increase your mental and your physical strength, and thus by developing your common sense, will in every way enure to your advantage. A thoroughly educated physician, in its true sense, means a thoroughly educated man, and therefore, those of you who aspire to win distinguished and deserved professional renown, will find that with this, the termination of your pupilage, your student's life has just commenced, and it will be co-existent with your period of usefulness on earth. Let your motto be, honor and honesty, sobriety and diligence, and you will not, you cannot, fail.

CLINICAL REPORTS

SARCOMATOUS TUMORS IN THE ORBIT.

BY LUCIEN HOWE, M. D.

CASE No. I. E. M., was a woman of forty, who usually enjoyed excellent health. About 1873 she noticed a "small black speck" on the lower and inner portion of the conjunctiva of the right eye. This gradually increased in size till on the 3d of April, 1877, she presented herself at the Buffalo Eye and Ear Infirmary. The condition on that day was recorded substantially as follows:

Lower lid pushed down and outwards half an inch. Between its internal two-thirds, and the globe of the eye, there exists a tumor which measures $1\frac{1}{8}$ inch horizontally, $\frac{5}{8}$ inch vertically, and projects $\frac{1}{2}$ inch beyond the edge of the lower lid. It is dark colored, vascular, but not compressible; movable, not tender. The globe of the eye is pushed up and backwards, and partly hidden by the growth and its movements in different directions considerably impeded. Moreover, on the internal and inferior quadrant of the cornea, there is a spot infiltrated with pus, and the vision of the eye markedly impaired—more exactly $V = \frac{1}{16}$. Pain is not a constant symptom, but frequently felt in the eye and its vicinity.

On account of the interesting features of this case, the patient was exhibited at a meeting of the Buffalo Medical Association, in April of that year, and various opinions were expressed as to the prognosis. One gentleman, of wide surgical experience had even been led to think that the removal of growths decidedly "malignant" would give in general only temporary relief, and was therefore to be discouraged.

Operative interference was not delayed, however, and on the 7th of April, chloroform was administered, and assisted by Doctors Abbott and McNiel, I attempted the removal of the

growth. In its deeper portions, however, it was found to have invaded the globe of the eye to such an extent that it was necessary to remove that also. Especial care was taken to extirpate every trace of the growth, and the incisions were extended on every side into tissue, which seemed to be healthy. A light bandage was applied, the patient rode home in the horse-cars, and apparently suffered but little inconvenience from the procedure. By the third day the reparative process was well established in the outer portion of the wound, while the parts formerly contiguous to the tumor were much swollen and covered with a thick layer of pus.

A subsequent examination showed that a minute spot, similar in appearance to the growth, still remained in the orbit and suspecting that in spite of all precautions, a portion had been left, still further removal of the tissue was deemed advisable. Chloroform was again administered therefore, and the contents of the orbit in its lower and inner angle entirely extirpated, the incisions in this locality being carried well down on to the bone. Healthy granulations appeared soon afterwards, the wound healed rapidly and no further annoyance has since been experienced. A microscopic examination of the growth showed it to be a melanotic sarcoma of the spindle-celled variety.

Case No. II. J. B. C., a farmer, 54 years old, from the town of Colden, in this state, consulted me on the 5th of last December, concerning a growth at the inner angle of the right eye. Five years before he noticed a small projection in the conjunctiva a little external to the caruncle. This gradually increased in size for two years, when it was partially "eaten out by a plaster" applied by an irregular practitioner. As a result of that attempt, extensive cicatrices were formed which produced marked ectropium of the lower lid and also drew the upper one down far over the globe. This condition of the lids persisted when the patient consulted me, and the tumor in the meanwhile had attained the size of a small walnut. It occupied the entire inner angle of the eye, being attached to the inner portion of the lids above

and below. It had pushed the eye-ball outwards extending over nearly half of its internal surface and was firmly attached to the tissues about the lachrymal bone. It was of a bright red color, quite vascular, not compressible nor tender and movable only at its outer portion. Pain was experienced only occasionally but was of a sharp, lacerating character. Under such circumstances there seemed to be no question as to the advisability of operative interference. Accordingly, ether was administered on the 13th of December, and the growth completely removed. There were found to be no attachments to the globe of the eye, and it was therefore allowed to remain, but all the tissue in the vicinity of the base of the tumor was thoroughly extirpated.

One incision was carried obliquely upwards along the superior margin as far in as the orbital ridge and lachrymal bone; another extended obliquely downward along its inferior margin quite to the nasal process of the superior maxillary bone, and everything included in this triangle, with the exception of the lids, was carefully dissected out. The wound healed rapidly, and thus far there is not the least symptom of any recurrence of the disease. The microscopic appearances of the tumors were such as characterize a sarcoma, the round cells being thickly strewn through a connective tissue stroma. Its general structure was like that of the alveolar, round-celled sarcoma, figured by Rindfleisch,* provided no pigment were visible.

These cases appear to be of interest; 1st, as examples of a rare form of disease; 2d, in the favorable result thus far of the operation; 3d, as furnishing some indications as to the extent to which the tissue adjacent to such tumors shall be sacrificed.

In regard to the frequency of these growths in the orbit, an approximation was attained, by examining the statistics found in the reports of ophthalmic hospitals and infirmaries, in which an aggregate of over thirty-eight thousand patients had been treated. This showed that only one such case occurred, on the average, in over four thousand, one hundred and twenty others of diseases of the eye.

*Lehrbuch der Pathologische Gewebelehre—Fig. 45.

Again, the sarcomata are specially "malignant," and almost invariably terminate fatally. This is particularly true of the new formations of which the first case is illustrative. An eminent writer expresses the views of many others in saying "these melanotic tumors are amongst the most malignant of the sarcomatous growths." As further showing the dreadful results of this class of diseases, the writer would refer to the interesting cases reported by Doctors †Dyer ‡Hag and ||Higgins. All the cases which I have thus far found on record, and in which the conditions were similar to No. 1 here given, have proved fatal within two years and eight months.

Finally, the result in the two cases here described, would seem to indicate that an early operation, with very free extirpation of the adjacent tissue would, in some instances, arrest the progress of the malady. The fact that the growth recurred in the orbit of the woman, after *all* those portions had been thoroughly removed, which could be recognized by the naked eye as in the least abnormal, and the fact that the wound healed so completely after the second operation, would appear to show that in the extirpation of malignant tumors, wherever found, we should not hesitate to include the adjacent tissue to as great an extent as it can be spared. Neither sight nor touch furnish us any positive data as to the extent to which the contiguous portions are involved, and no attempt at operation should be made, unless we remove every perceptible trace of the growth and as much more as can, with propriety, be sacrificed.

* Pathology and Morbid Anatomy—Green—English Edition, p. 120.

† Trans. American Ophthalmological Society, vol. ii, page 538.

‡ Trans. International Ophthalmological Congress.

§ British Med. Journal, Dec. 8, 1877.

TRANSLATIONS.

J. A. ESTLANDER'S CLINICAL CONTRIBUTIONS,
TO THE KNOWLEDGE OF OSTEO-SARCOMA OF THE SUPERIOR MAXIL-
LARY BONE, AND OF ITS TREATMENT BY RESECTION OF THE
BONE.

FROM THE SWEDISH BY HERMAN MYNTER, M. D.

FOR the surgeon called to treat a disease as serious as osteo-sarcoma of the superior maxillary, and still more for the patient, it is, above all, necessary to know, on the one hand, what are the chances of a definite recovery, or at the least of the prolongation of life, if one undertakes the dangerous operation of resection; and, on the other hand, how long the patient will be likely to live, if it be not undertaken. In order to answer these two questions, it is necessary that the surgeon know the average duration of the malady if left to run its course without the operation; as, also, the condition of the subjects, the number of radical cures on the one hand; on the other, the average time between the operation and the relapse, or the death which follows. These data, obtained in various ways, are, up to this time, too little determined; the surgeon seeing the patient only during a limited period of the disease, most often during his sojourn at the hospital. Doubtless he can learn the history of the patient and of the affection before the time of consultation; but too often he loses sight of the patient from the time he leaves the hospital after the operation, or without it. The comparison of a sufficient number of cases, well studied from the first attack until their termination, favorable or fatal, is necessary, in order to judge of the value of the operation. It is this work that the author has attempted, and of which he gives an account in his work.

The number of cases treated by him reaches twenty; not many, but he was, at least, able to follow them all to the end,

and he has taken very complete notes of the progress of the disease from the commencement until the time when the patients presented themselves for treatment. Following we have the detailed history of these twenty cases, of which fifteen were men, and five only were women. The age varied from twenty-seven to sixty-nine years, and the number of patients below the average age of forty-eight years, is about the same as the patients above that age. The author demonstrates that with all, the disease presented, in its entire course, a remarkable uniformity, and he has given a particular account of the symptoms.

In four cases no operation could be made. One might add a fifth patient who was subject to an operation, but the tumor had penetrated the cranial cavity, and the patient would not probably have lived more than fifteen days. The duration of these cases, from the first attack until death, varied from five to nineteen and three-fourths months; the average is nearly a year. The cases operated had about the same duration. The progress of the disease has been generally a little more rapid with younger than with older subjects. The microscopic structure of the tumor did not appear to exercise a marked influence upon the rapidity of the disease, the *neoplasma*, with spindle-shaped cells, being no more mild than those with round cells. Besides, the two species co-exist in the same tumor, developing one after the other. A structure more areolar, and containing more connecting tissue, seems to indicate a more favorable condition.

As to the most essential part of the work, the prognosis of the resection, the author thinks one ought not to be too saving in operating. He rejects after his own experience, unfortunately in the commencement of his surgical career, partial resection for osteo-sarcoma of the superior maxillary, and he expresses the opinion that one rarely has occasion to regret the removal of too much, but too often that he has removed too little. In sixteen cases, two patients died shortly after the operation, their death not being necessarily attributed to it, (in one case meningitis, in the other simple pyæmia, supervened when the wound

was almost closed). In one case death was due to an intervening malady; in a fourth, the result was still undecided.

Twelve cases remain from which to judge of the value of the operation. In two of these there has been a final cure; in two others a relapse, not *in loco* but in the glands of the neck, and the lives of the patients have been prolonged for a year. In the others, the relapse occurred *in loco*, and nothing was gained by the operation. With one of the subjects who recovered, the disease had not made much progress; but with the second, it had advanced considerably.

The study of all the cases which the author describes, leads to the conclusion, which seems quite strange at first, that in general the patients presented themselves to the surgeon just midway between the first stage of the disease and its termination; or in other terms, that the time, from the first appearance of the affection until the consultation, is about the same that remains to the patient to live; and this whether he be operated upon or judged unfit for an operation, (cases operated upon with success not counted).

Thus, when a subject has suffered from the disease six months before the presentation, or the operation, he would probably live six months; if he presented himself sooner—and for the reason that the disease makes more rapid progress, it would have the same rapid course, after the operation, and he would die sooner. The operation, if not followed by complete success, observes this law so far as the cases of the author permit him to judge. It seems only that the sufferings of the patient are less severe, and death less fearful in character with the operation than it would have been without it. But at what price do the sufferers gain this advantage? In the first place, it is necessary to consider the immediate danger of the operation. Even if one admits with the author, that these two cases of death ought not to be attributed to the operation, it is certain, and the author does not deny it, that the resection of the superior maxillary, is a serious operation, liable to produce death. There have been cases in

which fatal hemorrhage has occurred by the introduction of blood into the air passages, and to obviate this peril it has been proposed that the previous operation of tracheotomy should be performed, a Trendelenburg's canula being introduced into the trachea. The author has never had recourse to this aid, believing it to be quite superfluous if one operates rapidly and regularly; but yet there are other dangers to be avoided. Briefly, there is some danger, but it is more than counterbalanced by the chances of a radical cure. The pain of the operation may be avoided, or greatly alleviated by anæsthetics, and after the operation, there is no suffering. For a time he is completely delivered from the distress previously experienced. The time demanded for the healing of the exterior wound, is short, and at the end of five weeks usually the patient is able to resume his habitual occupation. The difficulty in eating soon passes, but there is an unavoidable disfiguration of the face, consequent upon the removal of the bone.

To sum up, one can predict that a patient attacked with osteo-sarcoma of the superior maxillary, would have, ordinarily, a year to live after the commencement of the disease. During the first six months, his sufferings would not be very acute, so that generally he would not apply to a surgeon until this time had expired. Then, if he did not submit to an operation, he would still have six months more of life. The same thing occurs, if the operation should not be successful. When the disease has made so rapid progress that the patient is forced to an operation his life is proportionately shortened. If he submits to an operation, he exposes himself to a certain danger, but with a hope of cure equal to one chance in six. He has the chance to prolong his life twice as long, but the probability is four times greater that he will neither gain nor lose so far as time is concerned; but that life will be rendered more endurable during his few remaining months.

Osteo-sarcoma of the superior maxillary is after all as terrible a disease as other malignant diseases with which mankind is

afflicted. There is little hope that its prognosis can be bettered by the progress of art; but it is possible, by the instruction of the people as to its nature and its danger, to induce them to apply more promptly to the surgeon, that an operation may be performed in the earlier stages of the disease, when the possibility of complete recovery is much stronger.—*Nordisk Medicinsk Archiv, Comptes-rendus.*

PUNCTURE OF HÆMARTHROS.—BY RICHARD VOLKMAN.

FROM THE GERMAN BY HERMAN MYNTER, M. D.

DR. RIEDEL'S investigations (*Deutsche Zeitschrift fuer Chirurgie* Bd. xii, S. 447), as to whether the blood coagulates in hæmarthros, when and under what circumstances the coagulation takes place, when and under what circumstances absorption takes place, are of great practical value. The author found in a large number of punctures the blood perfectly or almost perfectly fluid, when in cases of traumatic hydarthros the trocar was introduced during the first three days. Once after six days, 50 ccm., and three times after eight days, respectively 50, 80 and 100 ccm. dark fluid blood were removed without traces of coagulas, while in a large number of other cases of puncture between the fourth and eighth day, the principal part of the blood was fluid, but some coagulas were removed through the trocar, and others left behind in the joint. Once in a case of transverse fracture of the patella (5 days old) with broad diastasis of the fragments, and the joint perfectly filled, he found the blood coagulated in such a degree, that not a drop could be aspirated.

Against Riedel's belief, that even large coagulas of blood are quickly absorbed, the author mentions a case, in which he amputated fourteen weeks after the accident, and found the synovial cavity still filled with a large amount of coagulas, which adhered firmly to the synovial membrane, and not a drop of synovial fluid was found in the joint.

The author has advocated the use of the puncture of the knee-joint in cases of traumatic hamarthros, since the introduction of the antiseptic treatment of wounds. He states that ankylosis with total obliteration of the joint may occur in cases in which the coagulated blood is quickly organized. It does not occur often, and only provided a uniform layer of clot is deposited on the inner surface of the synovial membrane and the secretion of synovia is suppressed perfectly by it. Volkman verified this statement once in case of transverse fracture of the patella. Eleven months afterwards, when the patient died of some other disease, the knee-joint was found ankylosed in a straight position, the cartilage intact but united with each other and with the synovial membrane, by a continuous layer of fibrous tissue (1—2 lines thick), so that not the least movement was possible.—*Centralblatt fuer Chirurgie*.

SELECTIONS.

RENAL INADEQUACY.

DR. ANDREW CLARK read an able paper before the Medical Society of London, at its meeting in Nov. 1879, "On Renal Inadequacy." He began by remarking that he was painfully struck by the great number of people suffering from ill health, of which no sufficient explanation could be given. Some of these cases took their rise in a feeble and disorderly nervous system, some in vicious digestion, some in an imperfectly acting skin, some in unsuitable conditions of life and work, some in abuse of tea, coffee, tobacco, alcohol, and other narcotics, and some in the derangement of the chemical changes which accompany and determine assimilation and deassimilation. But a far larger number were due to a deficient secretion of urinary solids. "By renal inadequacy, I mean that state of kidney in which it is unable, without material diminution of quantity, to produce a urine containing the average amount of solids, and of a specific

gravity greater than 1014." The urine was pale, almost invariably free from albumen, and deposited no casts. He did not profess to determine what was the precise pathological state of the kidney; but he conjectured that it was one of slight withering and induration, just as sometimes the skin is found withered, hard, and incapable of producing a clear, unctuous sweat.

The symptoms and signs most commonly associated with renal inadequacy were flatulent dyspepsia, palpitation, with a very feeble and interrupted capillary circulation, a dry, shiny, waxy skin, numbness, tingling, cramps, and pains in the limbs, occasional flushes, worry of brain and general nervousness; sometimes, but rarely, evidences of gout. One knew in a given case that these symptoms were due to renal inadequacy, not merely because there was a grave deficiency in the excretion of urinary solids, but because whatever diminished that secretion or added to the amount of solids to be excreted, invariably in a short time, aggravated the patient's sufferings. Three things were of great importance in these subjects—they are exceedingly vulnerable; they repair very slowly the damage done by accident or disease; they bear very badly the shock, however slight, of surgical operations—a fact mentioned by Sir Francis Paget. As to prognosis, this state seemed capable of indefinite prolongation without serious injury to the organism. Under unfavorable circumstances and bad management, death might occur from some local inflammation, from cerebral or other hemorrhage, or from so-called pyæmic fever, springing unexpectedly out of some perhaps trifling operation. The special characters and appearances of patients who have been the subject of renal inadequacy for over four or five years are:— They have at least a marked and striking physiognomy; they increase in flesh; they become puffy without being distinctly œdematous; the skin becomes dried, more shiny and yellower; the features swollen almost to distension; the pupils are dilated; the lips and cheeks of a bluish red; the articulation deliberate and somewhat difficult and the whole intellectual tone

and manner subdued and slow. From one side the physiognomy was like that of pernicious anæmia, from another like that of chronic Bright's disease, and yet it seemed distinct from both.

As to treatment much might be done by good management, by which he meant the adjusting of the quantity and quality of the food to the diminished excrementitious activity, the withholding of such agents as directly lessen the secretory power of the kidney, aiding the kidney in its work by making the supplementary excretory organs fulfill that part of the work which the kidney was unable to do; and generally by placing the patient in those conditions which would give the organism the greatest power for resisting the inroads of the disorder, and for making sufficient compensation when complete repair was unattainable. The tepid bath, followed by vigorous friction, the use of warm clothing, and the avoidance of passing exposure to cold and damp, with gentle exercise daily in the open air were indicated. The diet should be light; stimulants should be avoided except to the extent of one glass of claret or other light wine, twice a day. The medicines most useful were small doses of arsenic with reduced iron at meals, and an occasional mercurial alterative. If digestion is disturbed the iron and arsenic were discontinued, and bitters with alkalies between meals substituted, with a mercurial alterative every third night. He concluded by narrating a case which he first saw some years ago. By a strict adherence to a limited dietary, and by the use of purgatives and diaphoretics, this patient improved so much as to consider himself quite well; whereas, when he was taking food and wine every two hours, it seemed that the more he took the worse he became. A very remarkable fact about this case was that as his supplies of food and wine were reduced, the patient's urine steadily rose in density from 1003 up to a very fair standard, and in three weeks he left town declaring himself quite well. When seen six months ago this patient seemed and declared himself to be quite well, his only complaint being that he could not relax his dietary without being ill.

In the discussion which followed, Dr. C. T. Williams said these cases were generally treated as dyspeptics. He asked whether weight was gained or lost under the restricted diet; whether there was corpuscular deficiency or excess in the blood, or any signs of anæmia. Dr. Gilbert Smith asked whether it was due to renal defect or blood change. Did the kidneys refuse the blood or did the blood refuse to go to the kidneys? Had the organs been examined after death? Dr. Routh said there was no proof that the author's dictum was correct, and inclined to believe the ailment due to defective assimilation, and therefore lessened amount of salts in blood and urine rather than to renal inadequacy. Dr. Dowse had seen several cases similar to those described by Dr. Clark, but had never examined the kidneys after death. He did not for a moment doubt the existence of such a condition as renal inadequacy. Dr. Symes Thompson agreed that the kidneys must be at fault in these cases. He had not known that a diminished diet could increase the specific gravity of urine. Dr. Andrew Clark replied, urging the fact that proved the existence of such a state as renal inadequacy; that retention of excreta leads to disease, and that in a case he had at the London Hospital, nitrogenous diet increased the defective action of the kidneys. Some of the patients gained weight, others lost flesh on the strict regime. The blood did not appear abnormal. Apparently normal skin sometimes refused to perspire normally. Why should not a kidney which refused to act, yet show no apparent change?—*London Lancet, March, 1880.*

POST-PARTUM HEMORRHAGE.

IN the clinical records of the Rotunda Hospitals, presented to the Obstetrical Society of Dublin, the following interesting report was made by Lombe Atthill, M. D., Master :

Post-Partum Hemorrhage.—There were thirty cases of *post-partum* hemorrhage, some of which were of an alarming nature. The use of hot water in the treatment of this complication was

very frequently employed both in the hospital and extern maternity, and has proved eminently satisfactory. It has, indeed, much to recommend it, for not only is it a powerful hæmostatic and excitant of uterine contraction, but it is also a general stimulant. If used with ordinary care it is not only harmless, but beneficial, by thoroughly cleansing the uterus from clots, portions of membrane, &c., which may have been left in its cavity; and, what is a matter of great importance, it is always at hand when wanted. It will not, we are of opinion, be found altogether to displace the use either of cold water, or of the perchloride of iron, but rather to be applicable to a distinct class of cases, in which the former of these remedies would be unsuitable and the latter unnecessary.

Dr. Atthill was first induced to try the use of hot water in the treatment of uterine hemorrhage, in the earlier part of the time embraced in this report, in consequence of a letter written by Dr. Whitwell, of San Francisco, to Dr. Foley, of Boston, who was studying at the time in this hospital.

The method of carrying out the practice is exceedingly simple. An ordinary syphon-syringe is the only instrument required, though we now use one with a long vulcanite nozzle specially constructed for vaginal and intra-uterine injection. This is carried up to the fundus, and, with the usual precautions against injecting air, and securing a free return, we inject water as hot as can be conveniently borne by the hand—*i. e.*, about 112° F.—in a full stream into the cavity, continuing thus until a good contraction is secured, and the water returns quite clear and colorless.

The following are some of the results of our experience in the use of hot water:—

1st. In cases of sudden and violent hemorrhage in a strong and plethoric woman it is better first to use cold.

2d. Where from the prolonged or injudicious use of cold, the patient is found shivering and depressed, the beneficial effect of injecting hot water is rapid and remarkable.

3d. In nervous, depressed, and anæmic women, hot water may at once be injected, without previously using cold.

4th. In cases of abortion, where from uterine inertia the ovum, although separated from the uterine wall, is wholly or in part retained, the injection of hot water is generally followed by most satisfactory results.

5th. Where the injection of the perchloride of iron is considered necessary, previous injection of hot water clears the uterus of clots, &c., permitting the fluid to come directly in contact with the bleeding surface, and lessening the chance of septic absorption.

The following cases will illustrate its effects:—

Case I.—E. D., aged twenty-four. Labor was tedious, and completed finally with forceps; afterwards there was some sharp *post-partum* hemorrhage, which was temporarily arrested by cold and ergot. The uterine contraction was not, however, satisfactory, and more or less draining continued for some time after delivery. Hot water was at length injected, and was followed by firm and permanent contraction.

Prolonged Use of Cold Water; Successful Injection of Hot Water.—Case II.—M. H., aged twenty-seven; fifth confinement. This patient had had hemorrhage after former labors. On this occasion the process proceeded naturally and rapidly until after the birth of the infant; but some hemorrhage preceded the expulsion of the placenta, which was accompanied by a quantity of blood and clots. The flooding now became considerable. The pupil in charge of the case summoned the assistant physician, and in the meantime tried to check the hemorrhage with cold water, which he not only injected into the vagina and uterus, but also poured from a height upon the abdomen. The patient was found at about four o'clock, on a raw spring morning, with her bed and linen saturated with cold water, depressed and shivering, with blanched face, and small, feeble and rapid pulse—135 per min. A small stream of blood was still flowing from the vulva; the uterus being relaxed and distended, a quan-

tity of clots were expelled by friction and pressure, and hot water immediately injected. There was no more hemorrhage, and when the bed linen had been changed and a hot jar applied to her feet, the patient expressed the greatest satisfaction; her pulse had fallen to 115. She had subsequently an attack of pleurisy with effusion, but finally made a complete recovery.

The following illustrates the use of hot water in cases of abortion :—

Case III.—B. D. was attended at her own home. The foetus came away on January 4th, and was apparently of four months' growth; the placenta was retained, and there was considerable hemorrhage. She came into hospital two days after, and on examination the os was found patulous, and the placenta could be felt through it; all attempts to remove it with the finger, however, failed. There was still a profuse discharge, and the patient appeared weak and anæmic. Hot water was injected, with the effect of immediately stopping the hemorrhage, uterine action set in, and the placenta was expelled five hours after.

Severe Post-Partum Hemorrhage; Failure of Hot Water; Injection of Liquor Fer. Perchlor. Recovery.—Case IV.—M. M., aged thirty; second pregnancy. In this case the breech presented, and the funis prolapsed with the escape of the waters; as no pulsation could be felt in it, labor was allowed to proceed, a putrid female child being finally expelled by the natural efforts. The placenta came away in twenty minutes, and the uterus being firmly contracted, the binder was adjusted. Two hours after delivery violent hemorrhage set in; cold napkins were applied to the vulva, friction to the fundus, and ergot injected hypodermically; cold water injected into the uterus, which failing, hot water was injected, and spt. terebinth. 3ss. given by the mouth. As the womb, however, still continued flaccid, the hand was introduced and a quantity of clots removed; at length the uterus contracted, expelling the hand. This favorable result was, however, only of temporary duration, for it again relaxed, and hemorrhage recurred as briskly as ever. The patient was now

becoming weak and faint, with a pulse of 185 beats a minute. It was now determined to inject the perchloride of iron. The hand having been again introduced to remove any clots which might have formed in the cavity of the uterus, it was thoroughly washed out with hot water, and about eight ounces of the stypic solution slowly injected. Hemorrhage immediately ceased, and the patient made an excellent recovery.

Post-Partum Hemorrhage ; Injection of Perchloride of iron ; Death of Patient.—Case V.—M. H., aged twenty-three. This woman, who was married to a soldier, had been for some time in bad health attending the out-patient department, but previous to admission into the hospital was so ill that she was unable to leave her bed. When first seen she was very feeble and anæmic, and presented many well-marked symptoms of tertiary syphilis, which disease she said she had acquired two years previously ; she also stated that this was her second pregnancy, having previously given birth to an immature and putrid fœtus, and that she feared this child was also dead, as she had not felt its movements for about three weeks. On examination she was found to be already in the second stage of labor, the head presenting. Shortly afterwards the child was born, dead and putrid as predicted. About twenty minutes after this, the placenta not having come away, the pupil in attendance sent for assistance. The uterus was found enormously distended, almost filling the abdomen. On pressure being made, a quantity of blood and clots were expelled with the placenta ; cold water was injected into the uterus, but failing to cause contraction it was immediately followed by hot. Ergot and sulphuric ether were at the same time injected hypodermically, after which the womb contracted firmly, but the general symptoms were very alarming—the pulse could not be felt at the wrist, the patient became very restless, endeavoring to sit up, crying out that she would smother, that all was dark around her, she could see nothing. The foot of the bed was immediately raised, and the pillow taken from under her head. At this critical juncture the

uterus again relaxed and hemorrhage recurred. The solution of perchloride of iron was produced, but before it could be injected a violent convulsion came on. The case now appeared to be desperate; nevertheless, as a *dernier ressort*, the styptic was resorted to. The tube of a syringe was passed up to the fundus, and about six ounces of the fluid injected. The uterus did not contract; respiration immediately ceased, and she was dead. About forty-five minutes elapsed between the birth of the child and the death of the mother.

Autopsy.—There was general thrombosis throughout the entire venous system; none of the solution had, however, entered the fallopian tubes or the peritoneal cavity.

AMPUTATION OF HIP-JOINT AND EXCISION.

PROFESSOR LISTER, before the Clinical Society of London, in February, stated that he had never seen a case in which amputation of the hip was called for in preference to excision. Since seeing Professor Sayre illustrate his method at the Philadelphia Congress, he had followed that plan, which involved only a limited incision, did not require the ligature of any vessel, and gave free access to the joint, whilst the subperiosteal section was of great advantage. The last case he had operated on was in a young lady twenty-five years of age, the subject of hip disease from early childhood. The limb was flexed and riddled with profusely discharging sinuses. He excised after Sayre's method, broke through the ankylosis, and found the acetabulum to be perforated. All the diseased bone being cleared away, chloride of zinc was applied, and now, three weeks after, there was far less discharge than at any time before the operation.

In regard to the treatment of abscesses in the hip, he would mention three cases he had had at King's College Hospital in adults. If treated by simple incision, frequent washing out, and free drainage, the result might have been different from what it was. One was a young woman in whom the inflammation was

attributable to sleeping in a damp bed; the second was a man in whom it had followed acute rheumatism; and the third was in an old woman, also rheumatic in origin. In each case the abscess was opened and treated antiseptically; no fever followed, and no shortening of the limb. No one could imagine the satisfaction at such issues; for had these cases been treated in the ordinary way, probably all three patients would have died. In strumous cases—where shortening exists, with or without perceptible grating—he should open the abscess antiseptically, and often more useful limbs are thus preserved than by excision; and even in advanced cases, for it is surprising what may be done by repair. In one case he had at Edinburgh, treated on this plan, he removed much carious substance, and the case went on so well that he thought it would not come to excision. No pus was formed, and the patient was almost well, only a small sinus oozing serum remaining when the antiseptic dressings were given up. Suppuration followed, and excision had to be resorted to. He therefore urged strongly that if they wished to do full justice to their patients they ought to use antiseptic measures when the skin was unbroken. There should be no difference in their practice of hospital patients and private cases. If hospital cases were to be deprived of all the benefits they could bring to them, then hospital accommodation was shamefully and disgracefully inadequate.—*London Lancet, March 1880.*

THE ETIOLOGY OF PUERPERAL CYSTITIS.

BY SWARTZ, OF HALLE, A. S.

THE author supports the view that cystitis in lying-in women is a disease which arises by infection. Injuries received during parturition cannot, any more than the mechanical irritation of the bladder and urethra by repeated introduction of the catheter during labor, set up cystitis. Retention of urine must also be rejected as a cause; for spontaneous decomposition of retained urine never occurs. The causes of puerperal cystitis, are: (1)

the introduction of phlogenic material directly into the bladder by the catheter, and (2) the spontaneous extension to the vesical mucous membrane of inflammatory processes in its neighborhood. A collection of thirty-two cases of this disease out of about 1100 lying-in women in the Midwifery Clinique at Halle, A. S., in the years 1868—75, shows that in by far the majority of cases, the disease arose from the introduction of infective material directly into the bladder by the catheter. Among these twenty-two cases of puerperal cystitis (twenty of which were simple cystitis, and twelve complicated with pyelitis) only two arose from the extension of inflammation in the neighborhood; the remaining thirty (in twenty-one quite certainly, in nine with the greatest probability) as result of the introduction of phlogenic material by the catheter.

This cystitis does not especially affect those lying-in women who have had difficult labors, nor those who suffer from inflammatory affections in the neighborhood of the urethra and bladder; but such as have been catheterized. Antiseptic measures (especially the entrance of air into the bladder is to be avoided, to do which the catheter should be introduced into the bladder filled with carbolic solution) securely guard against the introduction of infective material. Since 1875, these precautions have been employed in the Halle Midwifery Clinique, and puerperal cystitis, arising from catheterization, has become very rare. It must be mentioned that the author accepts the view that the lochial secretion, under entirely normal conditions, may contain the injurious material.—*Centralblatt für Gynäkologie*.

MISCARRIAGE AND DEATH RESULTING FROM INFLAMMATION AND
SUPPURATION CAUSED BY THE PRESENCE OF MEDICINAL SUB-
STANCES IMBEDDED IN THE WALLS OF THE APPENDIX VERMI-
FORMIS.

MRS. B., entered the hospital July 27th, complaining of uterine pains, threatened abortion, and pain in the left hypochondriac space. It was supposed she had suffered from injury. The

treatment, which was only palliative, to prevent the threatened miscarriage, consisted in the most part in enjoining rest and giving opiates. She was delivered of a five months' foetus within three days after her admission, and died very suddenly and unexpectedly in 14 hours afterwards.

Inflammation of the omentum and intestines was found to exist, and a large quantity of purulent fluid in the abdominal cavity, with deposits of plastic lymph. The purulent fluid was found to proceed from an abscess existing in the walls of the appendix vermiformis at the point where she had complained of pain upon admission.

Five or six hardened pills (none of which were administered in this hospital) were found imbedded in the walls of the appendix, and the irritation caused by these seemed to furnish the only plausible explanation of the ulcerative inflammation which produced her death. There were no marks of injury external nor internal.—*North Carolina Medical Journal*, Dec., 1879.

IODIZED PHENOL—"BATTEY'S FORMULA"—IN ECZEMA
MARGINATUM.

BY W. J. H. BELLAMY, M. D., WILMINGTON, N. C.

R̄

Iodinii cryst, $\frac{3}{4}$ ss.

Ac. Carbolic cryst, $\frac{3}{4}$ j.

Mix and combine the two by gentle heat.

The above formula of the renowned Battey of Rome, Ga., provides a combination which has probably given more satisfaction to the gynecologist in uterine therapeutics than any agent that has been suggested for many years past. It is not alone useful for such affections, as concerns the specialist alluded to, but as I am prepared by quite an extensive experience with its use to say

it has given me more satisfaction in the management of those intractable forms of skin disease characterized by intolerable itching, than any of the much vaunted parasitocides so much in use by the dermatologists of the present day. Most particularly in that disease, the pathology of which is now well understood, viz: eczema marginatum, and which, for such a long time has almost baffled the skill of the country practitioner, is this agent most useful. In most cases of "skin disease," when the diagnosis is not clear, but where itching is the prominent symptom, and when it is reasonable to suppose the presence of some parasite, it is a most useful remedy. It allays itching, it relieves pain. The anæsthetic property of the carbolic acid prevents the agents from giving much more than momentary pain.

My rule has been at first to dilute it with glycerine, equal parts, making the application twice in twenty-four hours, touching every point of irritation thoroughly by means of an ordinary camel's hair pencil, or glass rod (brush.) It may be used according to the sensibility and idiosyncrasy of each case, diluted, or of full strength. When used, as I have used it often, of full strength, it causes only an exfoliation of the epidermis, no ulceration or destruction of any great amount of tissue in any case, and no pain or annoyance to the patient, the relief of the itching or presence of the distressing malady, producing so much satisfaction. It may be remarked that in sulphurous acid we have an agent as potent, but how long can we keep sulphurous acid as such? How often can we get sulphurous acid when prescribed? Were we at the door of a "Squibbs" with each patient, and had we the laboratory and conveniences of the expert and proficient chemist, and were qualified to make our own acid as we needed it, then probably we would need no addition to our therapeutics in the management of such skin diseases as these we are considering. In almost every case where I have resorted to the phenol prescription above, the patient has been a sufferer for many years, and has gone from one to the other of the profession.—*North Carolina Medical Journal*, Dec., 1879.

OVARIOTOMY FOLLOWING INCISION AND LONG-DRAINAGE.

MR. KNOWSLEY THORNTON read a paper before the Medical Society of London on the above subject, giving a record of three cases of ovarian tumor, in which exploratory incision followed by drainage of the cyst with injections had been employed for two of the cases, and injections for the third. In all re-growth took place, and the author removed all successfully by ovariectomy. The periods between the first operation and the successful ovariectomies were respectively four years, three and one-half years, and eleven years. All these operations were complicated by serious adhesions. The cases taken together teach two important lessons: (1) the thoroughly unsatisfactory nature of the so-called cure by tapping or drainage; (2) the important fact that cases which have been treated by this unscientific method may still be successfully dealt with by the major operation of ovariectomy, even though many years have elapsed since the supposed cure.—*London Lancet, March, 1880.*

A CASE OF NEPHROTOMY.

AT Guy's Hospital Mr. Clement Lucas recently removed a suppurating kidney from a man aged thirty six years. The lumbar incision was adopted and antiseptic precautions were employed. At last accounts the patient was considered almost free from danger. The man had had a purulent discharge through the loin for six years.—*Medical Record.*

CONFLAGRATION FROM THE USE OF THE THERMO-CAUTERY
DURING ANÆSTHESIA FROM ETHER.

THE *British Medical Journal* (November 22, 1879,) from a French source, gives an account of an operation under ether for arthritis of the knee-joint, in which the actual cautery was employed. Five ounces of ether had been employed. The window had been opened, the room was large, and the ether-bag was to a certain extent separated from the thermo-cautery. Suddenly

the room was in flames, and the bed was enveloped in them. The ether-bag was thrown down on the floor and the patient quickly removed. She was only slightly burned, but the physician who was administering the ether was severely injured. Similar accidents have been noticed elsewhere. Ignition does not occur when the wire is only heated to redness: a white head is necessary. Some years ago Dr. Dolbeau practiced local anæsthesia with ether spray on the hæmorrhoids of a patient about to be operated upon. The apparatus having been removed, the red-hot iron was applied, but the ether vapor caught fire, and produced a general conflagration and extensive burning of the surrounding parts without affecting the hæmorrhoids.

A NEW ANTHELMINTIC.

The *Ocinum Baselicum*, a plant known in Buenos Ayres under the name of *Albochaca*, has an action of such a nature that the worms in every stage of development rapidly leave their location after the juice reaches them. Its use is so much more to be recommended, since in the event no worms are present, no injurious effect results from the plant, but a laxative and disinfectant action as the only result. Fifty grammes of the juice is given, followed in two hours by a dose of castor oil. A free discharge of the worms may be expected.

The above observations of Dr. Lemor, and the results obtained are very encouraging, and invite further investigation, the more since the number of anthelmintics is limited, and their action often unsatisfactory.—*Med. Neuigk.*

CZERNY'S OPERATION FOR THE RADICAL CURE OF HERNIA.

Of the many operations advocated for the radical cure of hernia, none have been proposed, thus far, that are free from objection of one kind or another. The advantages claimed by Czerny for the operation adopted by him are, that the results are more certain, as the fibrous columns of the external ring are drawn close together, and an exact application of the sutures can be made, causing a narrowing of the internal aperture. The

operation is as follows: An incision is made along the whole length of the hernia. If intestinal and reducible, the contents of the sac are returned to the cavity; if irreducible and intestinal, they are dissected loose and reduced, the sac being ligatured at the neck and cut off. When the contents are omental, they are included in the ligature with the sac. The fibrous columns of the external ring are drawn together by an interrupted suture of strong carbolized catgut. After the insertion of a drainage-tube, the wound is closed with sutures and dressed antiseptically. This mode of procedure has been adopted in nine cases of inguinal hernia, without the occurrence of peritonitis.—*Chicago Medical Gazette*, Jan., 1880.

REMEDY FOR NIGHT SWEATS IN PHTHISIS.

KÖHNORN (*Berliner Klinische Wochenschrift*, Jan. 5th. 1880,) states, that in two cases, in which he had tried all other remedies in vain, he met with the most surprising success in treating the profuse night sweating of phthisis, by means of the powder which is employed by the Military Medical Department of the War Minister, for the treatment of sweating of the feet. This is composed of salicylic acid three, starch ten, and tale eighty-seven parts. The entire body is to be powdered with this in the evening, the patient protecting the mouth and nose by means of a handkerchief, lest the irritation from the salicylic acid might induce coughing. If the skin is very dry, the powder may be made to adhere to it by first rubbing it with fat bacon or spirits and tannin.—*Medical and Surgical Reporter*.

WOMEN AS PHYSICIANS.

In an article in the *International Review*, Dr. Chadwick makes the just observation that the question is no longer, "Shall women be allowed to *practice* medicine?" They are practicing it, not by ones and twos, but by hundreds; and the only problem now is, "Shall we give them opportunities for studying medicine be-

fore they avail themselves of the already acquired right of practicing it?" It is clearly the interest of the community to give to women the fullest instruction, in accordance with the most improved systems, and under the most eminent teachers; and also that their proficiency should be tested by the most rigid ordeals before they finally receive certificates. By a recognition of these certificates and their comparative values, the community would be able to protect itself from the impositions of ignorant or fraudulent pretenders to medical knowledge.

BENZOATE OF SODA IN DIPHTHERIA.

DR. LETZERICH has successfully treated, with benzoate of soda, 27 cases of diphtheria which came under his care during an epidemic of the disease in Berlin. Of these cases eight were severe, accompanied by high fever, delirium, retention of the urine and feces, existing often before the extensive local affection had made its appearance. In the blood there was found numerous bacteria and plasma corpuscles, from which by cultivation in veal broth, very large colonies of micrococci became developed. The dose of sodium benzoate for children and adults is to be regulated by the weight of the body. The formula for infants under one year old is

R̄

Soda Benzoate. pur.	5.0
Aquæ Destillat.	
Aquæ Menth. pip., aa	40.0
Syrup, Cort. Aurant.	10.0

Half teaspoonful every hour.

The dose for children between one and three years of age is given at 7—8 grams in the course of a day; for children between three and seven years, 8—10 grams. Over seven years old, 10—15 grams, to be taken daily; no unpleasant effects have been observed even in young infants. The diphtheric membrane was sprinkled with the benzoate of soda in powder applied through a glass tube or quill. There is no slough formed, and thereby the danger is averted of its acting as a firm

covering under which an energetic development and growth of the organism can take place.

The insufflation was made every three hours in severe cases ; in the mild forms two or three times daily. The author also recommends this remedy in gastric or intestinal catarrh, particularly of infants, and states that at times the results are surprising in these latter cases. He firmly believes in the statement of Klebs, that it is to be recommended in all diseases which originate by infection.—*Boston Méd. and Sur. Jour., from Berlin Klein. Wochs.*

THE TREATMENT OF NEURALGIA.

ACONITE is an old remedy in Neuralgia which has, however, not altogether realized the expectation which were formed of its value. The power which it often lacks, has been lately claimed for its alkaloid by Professor Gubler, who announced that aconitia is almost infallible in trigeminal neuralgia. This substance was long banished from the materia medica for internal use, but it has been employed occasionally since the discovery of a crystallized form by Gréhaul and Duquesnel in 1871. Its value in neuralgia has lately been investigated by the New York committee on Neurotics, of which Dr. F. C. Sequin is the chairman. The dose of all forms of aconitia is about the same. The initial dose being about half a milligramme (or 1-130 grain) twice or thrice a day. There are differences in susceptibility and some persons cannot bear a larger dose than 1-200 grain ; while one case was met in which 1-84 grain every three hours was tolerated. From a trial of the treatment in a series of cases, the committee conclude that, on the average, distinct physiological and therapeutical effects may be obtained by giving 1-100 grain three times a day. Of six cases of severe trigeminal neuralgia, one, probably a reflex neuralgia from a decayed tooth, was not at all benefited. Three cases of epileptiform neuralgia were slightly, or only temporarily relieved. Two cases were cured. One of them had existed for seven years, with an interruption of seven

months, procured by resection of the affected nerve. The results thus afford a partial support to M. Gubler's assertion.

The value of ammoniacal sulphate of copper in the treatment of the same affection has been asserted by Mr. Féréol in a recent communication to the Académie de Médecine. He states that in cases in which every treatment has failed, even the administration of gelseminum and of aconitia, a cure or remarkable relief may be obtained to the most severe symptoms by this drug.

Among the examples he gave of its use was the following : Trifacial of two months' duration, with absolute (?) insomnia, was unrelieved by the extraction of teeth, quinine, bromide, aconitia, or tincture gelseminum, hypodermic injections of morphia or arsenic. From the first day of the administration of the ammonia sulphate of copper, there was a notable remission in the symptoms and cessation of the insomnia. In one case, the dose was pushed to eight grains, without any other accident than nausea. It has the drawback of occasioning a persistent metallic taste in the mouth. One case of intolerance was met with; in that a grain and one-half of sulphate of copper occasioned violent vomiting,—*London Lancet*, Aug., 1879.

DESTRO-QUININE IN PERIODICAL HEMICRANIA.

BY C. A. BRYCE, M. D.

I WAS called to see a little son of Mr. Charles Lankford of this city, several months ago, who complained of headache in the right side of his head and through the right eye. His sight was imperfect while suffering from the pain, and there was decided periodicity about the attacks, being much worse every other day; his nose would bleed very often when he was troubled with the headache. From the history of the case I regarded this as a neuralgic hemicrania of malarial origin. I accordingly prescribed quinine, iron and hyoscyamus; I found no improvement, but an increase of the head trouble with more hemorrhage from the nose. I then put him upon quinine alone; his head

continued to be congested and nose would bleed frequently. I then discontinued the quinine and put him upon ergot and bromide potassium. This seemed to check the hemorrhage to some extent, but the headache and imperfect vision remained. I then discarded all remedies and put him upon 3 gr. doses of Dextro-Quinine (K. & M.) three times a day. I am pleased to report that after the second day's use of Dextro-Quinine the hemicrania was entirely relieved, nor has it since returned; the eyesight became perfect, the bleeding of the nose has occurred but once since. This boy could not take quinine without producing congestion and necessarily hemorrhage. Dextro-Quinine obviated the difficulty and cured my patient.—*Southern Clinic.*

SOCIETY REPORTS.

BUFFALO MEDICAL ASSOCIATION.

Stated Meeting, March 2, 1880.

THE PRESIDENT, DR. LUCIEN HOWE, IN THE CHAIR.

THE subject for special consideration was presented in a paper by Prof. J. F. Miner, entitled "The Diagnosis of Disease without the aid of Physical Signs."

He pointed out the exact conclusions at which formerly physicians arrived, by depending upon the general symptoms of their patients, and hinted that perhaps the pendulum of medical opinion was now swinging too far, in favor of "Physical Signs."

He would not undervalue the assistance to be derived from the stethoscope or other instruments of precision, but thought that by depending too much upon the evidence thus furnished we were in danger of neglecting many important symptoms upon which a diagnosis could be readily and surely based.

On motion of Dr. Rochester, the discussion of this subject was deferred till another meeting, there being another of much importance to the profession of this locality, which demanded immediate consideration.

Dr. White then introduced the following preambles and resolutions :

Whereas, It is the duty of the medical men in every community in which they reside, to warn all those who rely upon them for any medical advice of any danger, present or threatened, to the public health of which they are cognizant ; and

Whereas, We know there exists in the very centre of this city an immense open cess-pool—a large accumulation of decaying animal and vegetable matter—known as the Hamburg Canal and its connections ; and

Whereas, This sink of filth has long existed, and notwithstanding all efforts thus far made at palliation, is steadily increasing in extent, and in the amount of poisonous effluvia emitted therefrom ; and

Whereas, The emanations from this vile collection, in the opinion of the members of this Society, now exert a highly deleterious influence upon all the inhabitants living in its neighborhood ; and

Whereas, In case of the prevalence of any epidemic disease, the health of the whole city would be greatly endangered by this mass of uncovered fermenting material, and also from the unsanitary condition of the sewerage in the lower part of the town ; and

Whereas, Much time is necessarily required to adopt and execute any comprehensive plan for the permanent drainage of the city : therefore,

Resolved, That this Society urge the Common Council, the State authorities having charge of the canal, the Board of Health of the city, and all good citizens immediately to take measures not only to remedy the terrible nuisance of the Hamburg Canal, but to adopt a comprehensive plan of drainage, by means of which the entire city, from North street southward, all of which inclines in the same direction, and should be embraced in the same plan, may be effectually and permanently drained.

Resolved, that we earnestly entreat the responsible authorities, and especially the Common Council, not longer to neglect this great sanitary work, in the delusive hope that through the influence of the abundance of pure air always blowing over the city, we shall much longer escape the legitimate effects of the pestiferous emanations from this sink of corruption upon the health of our inhabitants.

Resolved, That in the opinion of the members of this Society the palliative measures heretofore resorted to, instead of correcting the evil do but increase it by spreading it over a larger surface, polluting at the same time the water flowing in the canal for many miles, rendering it utterly unfit for use by "man or beast," and exposing to its horrible exhalations all who navigate this important channel or reside in its vicinity.

Resolved, That in the opinion of this Society no remedy can afford permanent relief from the baleful effects of the want of proper sewerage of this extensive territory, which does not contemplate its removal into the river below the water supply for the city, keeping it entirely out of the harbor and the canal.

Resolved, That as the guardians of the public health, as sentinels on sanitary duty, we admonish our fellow citizens that the apathy, the supineness which prevails in reference to this dreadful pest-hole must be shaken off, or the day is not distant when, like poor neglectful Memphis, we shall repent our omission in dust and ashes.

Resolved, That a copy of this preamble and the accompanying resolutions be transmitted to the Common Council, the Board of Health, and to the secular papers, with the request that they be published therein.

In moving the adoption of these resolutions, Dr. White said that this Society can perhaps do no more than point out the evil, the responsibility of remedying it lies with the Common Council, the Board of Health, the City Engineer, and the thinking business men. He would, however, suggest that instead of endeavoring to work out this problem of sewerage without the

assistance of experts, those who have studied the subject should be called on for advice. Sanitary engineering, though comparatively a new study, is now recognized as a specialty.

Memphis had been so bitterly taught the necessity of sanitary precaution that she has now wisely employed Col. Waring, who has already proposed a plan which, it is believed, will remedy her heretofore sadly defective system of drainage.

There was a rumor that the Central Railroad had offered to fill up the ditch and construct a good sewer the whole length of it, but this would not rectify the trouble. Clearly, some other measures must be resorted to for perfecting a system of drainage, and without doubt the enlightened part of the community were ready for action.

Dr. George N. Burwell seconded the motion to adopt the resolutions, stating their sentiment fully expressed his own views.

The Hamburg Canal had become perverted from its original purpose, and was now an unmitigated evil. It could readily give rise to a great epidemic, should there be at any time a high temperature accompanied by scarcity of rain. The seeds of disease were generated by a hot, dry season. Memphis bought the knowledge of this principle at a dear cost, and it behooves the people of Buffalo to evince their wisdom by taking prompt action.

Dr. Frederick W. Bartlett had proved from actual experience that in the district adjacent to the Hamburg Canal, there was an excess of mortality in cases of diphtheria, typhoid and scarlet fevers, which could only be attributable to the vicinity of such a nuisance.

Dr. Thomas F. Rochester said the canal was in effect nothing but a receptacle for disease-producing elements. In England scientific investigation had demonstrated that the drainage from sewers can be disinfected and diverted into any channel without detriment to the public health. This method might be adopted in the case now under consideration, should the entire removal of the nuisance be found impracticable.

Dr. S. S. Greene endorsed the resolutions, being convinced that the noxious gases arising at the head of the canal were swept by westerly winds over the city, distributing disease.

An invitation being formally extended to those gentlemen present who were not members of the Association to join in the discussion, Mr. Young, the City Engineer, said he believed the only practicable system of drainage, affording permanent relief, would be a belt sewer, connecting with a tunnel under the Erie Canal to the Niagara River. The enormous expense, however, of this plan might make it objectionable. He had inspected the ground and judged that a survey could be made within two weeks, and the results submitted. In his opinion the swift current of the Niagara River would effectually prevent the pollution of the water by the sewer discharge.

Mr. E. S. Hawley was gratified that the attention of medical men had been directed to this matter, as the public would respect their opinions, and in view of the present city debt, strenuous efforts would be required to accomplish the project. An intermediate course would only give temporary relief.

Mr. P. P. Pratt concurred in all the foregoing remarks, especially supporting the measure for the employment of competent engineers as a primary step in the work.

Dr. A. H. Briggs, the Health Physician, had been surprised at the comparative health of the city during his ten years' practice. He was satisfied the Hamburg Canal had caused and rendered extraordinarily fatal, such diseases as typhoid fever, diphtheria, &c.

Dr. A. R. Davidson thought that even if the Niagara River became polluted by the canal sewerage directed into it, this would again be thoroughly oxydized by air and water before reaching Lake Ontario.

Dr. E. C. W. O'Brien believed the evil effects of the canal had not been over-estimated. Much opposition would be raised on account of the expense. The City Engineer proposing such a plan must be hopeless of re-election.

Dr. J. F. Miner heartily approved the resolutions, it being undeniable that an enlightened community had never endured a more intolerable nuisance than the Hamburg Canal.

Dr. J. C. Cronyn thought the canal had unquestionably produced great mortality in its vicinity. The present current-producing plan was such an absurd and abominable piece of engineering that the originators ought to refund its whole expense.

After this discussion the resolutions were unanimously adopted, and the meeting adjourned.

EDITORIAL.

ALUMNI ASSOCIATIONS.

THE commencements held by medical colleges at the close of the winter session, within the past month, have been supplemented generally by the assembling of graduates, old and new, in their alumni associations; the older members attracted hither from distant parts, and often from urgent professional work; the new recruits, with parchment just in hand, to pledge their troth to Alma Mater. In conformity with the annual custom, such a gathering took place in this city, in connection with the late successful commencement of the Buffalo Medical College. In view of the ability and reputation of the men sent forth by this institution, we have been led to expect something of real professional interest and value in its proceedings—some evidence of earnest scientific research, some additions to the stock of human knowledge in the special department assigned to the medical profession. If we say that in this respect we have been somewhat disappointed, it is not designed to cast unfavorable reflections, or to disparage either the men or the meeting. This leads to the suggestion that such associations, like other medical societies, would be doing better service to the profession in gathering from its members, now scattered in every state, and in contiguous as well as in distant provinces and

countries, carefully collated facts, condensed from their experience and observation, than in scenes of banqueting, feasting and merriment.

It would indeed be an important step forward in the history of such organizations if their annual meetings could be made to develop an association of ideas, for the advancement of medical science alone. A wonderful impetus would thus be imparted to the medical philosophy of the present day, now depending rather upon the earnest labor of the few than upon the mass of the profession, who are willing to utilize all scientific research and investigations made by others, rather than to put forth an effort to contribute, even to a limited extent.

Many obstacles are in the way of securing methodical and consecutive work from such associations. As a rule they are wanting in the cohesiveness peculiar to like associations connected with departments of literature and the arts; but this deficiency is more than made up by the incentive to labor imparted to its votaries by the most humane of the learned professions. As now organized, they are simply auxiliaries in advancing the interests of medical colleges. We ask that their objects may be enlarged, and their field of labor broadened. The present faulty system of medical education also must be renovated. Medical schools should be encouraged by the profession at large, through individual and organized agencies, to adopt a higher standard and more extended study. The alumni of the respective medical colleges have a responsibility in this matter, which they may consistently share with their former teachers. Colleges are after all only representative agencies in the work of medical education. They can not be expected to rise above the sentiment of the profession and the community which fosters and sustains them. To mould this sentiment is a duty devolving upon the men duly commissioned by their authority. Let our alumni, therefore, seek a more complete organization, not only for original scientific research, but also to guard the great interests of the profession, of which they are for the time the custodians, in the matter of medical education.

REVIEWS.

Atlas of Human Anatomy. Containing 180 large plates, arranged according to Drs. Oesterreicher and Erdl, from their original designs from nature, &c., &c., with full and explanatory texts. To be complete in 45 parts, at 75 cents each. By J. A. JEANCON, M. D. Cincinnati, Ohio: A. E. Wilde & Co., publishers

In a former number of the JOURNAL we have directed attention to this admirable work. We have received Parts II, III and IV, and the commendation bestowed upon the first number, and the assurances given by the enterprising publishers that all subsequent numbers would be as complete and perfect as it was possible to make them, have been fulfilled.

The object is to bring before the profession a representation of all parts of the human body, in a size and form which ordinary works on anatomy fail to furnish. It is also purposed to publish as many and as correct microscopic figures bearing upon subjects connected with microscopic anatomy, histology and embryology, as are at present comprised within the scope of medical instruction.

It will be seen that the plan of the work is comprehensive, and if executed, will give the profession one of the most valuable aids to the study of the structure of the human body that has ever been furnished. The price of the atlas is so low that every practitioner and student of medicine should be possessed of it.

L.

Brain-work and Over-work By Dr. H. C. WOOD Philadelphia: Presley Blakiston

One of the American Health Primers, which, as its name indicates, contains a few common sense and plain ideas on the subject of nervous diseases, as augmented by undue mental labor. Trite and generally familiar as is much of the matter, it is presented in a pleasing style, and it would be well if our over-anxious young men, both in professional and mercantile life, would give heed to the warnings in the chapter on work, and to the excellent suggestions contained in the succeeding chapters relating to Rest and Recreation.

L. H.

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ORIGINAL COMMUNICATIONS.

TESTIMONY OF MEDICAL EXPERTS.*

BY HON. CHARLES BECKWITH,

Judge of the Superior Court of Buffalo, N. Y.

FIRST we have the parties, the people on one side and the prisoner on the other in criminal prosecutions, and in civil actions the plaintiff or party who alleges certain facts to be true upon which his rights depend, and the defendant who denies the truth of the allegations. These parties are supposed to be attended in court by counsel learned in those fundamental laws which define their rights or impose obligations, and who are also supposed to be skilled in those minor laws which govern the *processes* of legal investigation, the rules of practice and the principles of evidence. It is the office of the presiding judge, by the aid of the counsel, to take care that the practical steps in the proceeding are taken according to established regulations, and to observe that the proofs adduced are such as are just and fair between the parties, that is to say, are of a character that do not violate the principles of the law of evidence, that is, those

* Extracts from an address before the Buffalo Medical Association, April 6, 1880.

precepts and rules to which I have already referred as having been found out and prescribed by the courts during some centuries of experience as best calculated to subserve the interests of truth and justice. He is to see to it that neither party puts into the balance any unlawful weight, that neither party gets any irrelevant fact or testimony into the problem that is before the court for its solution. And then, when the proofs of the parties are in, it remains for the jury, according to the common explanation, under proper instructions from the judge as to the law applicable to the case, to estimate and weigh the testimony and facts in proof, and from them to deduce the conclusion whether the right asserted by the plaintiff is well founded. The true theory as to the part of the jury is, I think, that the conviction which is produced by the proofs so admitted under the watchfulness of counsel and supervision of the court, upon the minds of twelve fair and impartial men, is for all practical purposes the true solution of the question submitted. For, it may be assumed, that, under fair circumstances, the proofs that bring the minds of twelve men to one and the same conclusion, would convey the minds of mankind generally to the same judgment. Thus it is we are supposed to reach that probability of truth, that conclusion and judgment upon which men may safely act in the practical affairs of life.

Undoubtedly this is an imperfect apparatus, so to speak, and the results obtained are subject to some uncertainty, but surely the imperfection is not greater or the issues more uncertain than those which pertain to human affairs in general. Indeed, I believe that the experience of a long period of years in England and this country has failed to convince our ablest and most experienced jurists that a better plan can be devised for the adjustment of those differences and unfortunate controversies which arise among our fellow men. And I am informed that on the continent in Europe the impression is gaining ground that the system is a better one than that which has prevailed there.

Now, when a legal investigation has been instituted in one of our courts, it is the duty of counsel and the judge to restrain a

witness from testifying to any thing that is not within his personal knowledge, for it is a fundamental principle in the law of evidence that a witness may testify only to those matters that are within his own knowledge, and not to those he has learned from other persons or from public rumor. But the witness, it may be, is a stranger to the court and the jury; they know nothing of his personal history, his character, or his relations to the parties litigant, and consequently do not feel quite assured what estimate to put on his testimony. The expedient has been adopted of allowing the opposing counsel to cross-examine the witness, in order that it may be discovered whether he really knows the matters of which he testifies, and to disclose whether he had any interest, or any inducement to color his statements, though they may be literally true as to facts. And so in our system of trials the right of cross-examination has become established, and its exercise is regarded as one of the safest tests of the value of testimony. The interest felt by the party affected adversely by the testimony will sharpen his wits for the detection of any bias, or prejudice, or want of exact information on the part of the witness.

While the general principle is that a witness may testify only to what is within his own knowledge, there is one important exception to the rule. It is this, that men of science or skill, may, under certain conditions, give their *opinions* in evidence. At least lawyers are accustomed to say that they may give in evidence their opinions, though I apprehend that upon investigation and analysis the *opinions*, as such, are not taken as elements of proof, but rather the general facts, laws, principles or inductions to which those opinions relate.

A physician or surgeon, a lawyer, civil engineer or other person skilled in a science or art, may be brought into court as a witness in three different capacities, as it were; first, to testify like the common witness to some incident or ordinary fact that has fallen under his observation. Though he may be a man of skill, following a professional avocation, in this case, he stands

on a par with his fellow men; he cannot certainly safely decline to obey the summons that calls him into court, and when he has come into court he testifies under the same conditions as the ordinary witness. He is entitled to no other fee or compensation than that allowed other witnesses; he can claim no privilege; neither can he, in such case, be permitted to express his opinion on the facts.

Secondly, he may come into court to testify to those facts belonging to the art or science in which he is skilled, but which facts lie beyond the observation and knowledge of men in general. Though the facts to which he testifies are those which only a person skilled in his profession could verify, still, when proven, they take their place among the data of the case in group with the facts established by the other witnesses.

Thirdly, he may come into court as an expert to give in evidence his *opinion* upon the facts to which he testifies himself, or to which others have given testimony, or upon facts assumed hypothetically for the purpose of taking his opinion.

What is the nature and use of an expert's *opinion* taken upon a trial as evidence? The opinion is not given or received as in any manner advising the court or jury what decision to render. But there may be relations of cause and effect in physical facts, of which it is necessary to make proof; or a conventional regulation the existence of which is necessary to be produced for the consideration of the jury, in order to a just finding, but the processes by which the skilled witness is able to verify the existence of that physical law or conventional necessity, would be beyond the comprehension of an unskilled jury. There, then, the expression of the witness' *opinion* is taken as the compend of all the facts upon which the opinion was formed as well as the conclusion which the jury would have reached if capable of the deduction.

The principal remedy afforded by our rules of practice for the discovery of errors in expert testimony, is the cross examination. It has been claimed with some show of reason that when

suitors ask the opinion of professional gentlemen, and require for that purpose their involuntary presence in court, that they should be content with the opinion expressed, without the indignity of inquiring into the grounds thereof and into the extent of the witness' attainments in the branch of knowledge involved. Nevertheless, it is not easy to see how, consistently with the plan of a common law trial, the right of cross-examination can be safely abridged. I have set forth enough of the theory of common law procedure to show the necessity, while trials are conducted according to that system, of reserving to a party the right of cross-examining the witnesses of his adversary: It is a right which must be reserved for the discovery of truth, though it may be but sparingly used, as it is, sparingly and cautiously, by the most skillful and experienced counselors.

This right or privilege no doubt is sometimes shamefully abused, almost beyond the power of the court to prevent it, without depriving the *party* of the right his counsel misuses. It is intolerable to any honorable man's sense of decency to see the insolent manner counsel sometimes put on, and the barren impudence of questions put to witnesses who have been called upon the stand simply because they were unfortunate enough to possess the knowledge of something a party to a law-suit wishes to use. Such conduct seems peculiarly out of place when honorable professional gentlemen, scholars, men of science, are called into court to give the cause of justice, as it is called, the benefit of their researches, their knowledge, their skill.

But every witness called into court may remember that the insolence of a counselor is usually in the inverse proportion of the discipline and cultivation of his mind, and his capacity to try his suit like a lawyer, and that such is the common judgment of the profession. I think a great improvement in this regard is going on among members of the bar. I am glad to see that this matter of the treatment due witnesses, and especially medical experts, has been brought before the State Bar Association, and that the practices complained of have been denounced

as unbecoming a member of the bar. A report of a committee of that Association declares that "it is cowardly to attack unfairly a person to whom the court allows no reply." Public opinion, which controls every thing, is working a change in the manners and modes of courts and lawyers.

Not many years ago, not infrequently, a trial was less a trial between the parties to the suit, than a contest for superiority between lawyers, a struggle of legal athletes for mastery, and the prize of popular applause, and when the pulse and sympathy of the crowd, felt of course by the jury, betokened or announced which of the two athletes was victor, the cause of the client was too often won or lost accordingly.

I would not attempt before this learned society to reflect any light upon those questions of science which medical men are most frequently called upon to elucidate in court, nor to say what modes of exposition are best adapted to those occasions. But the observance of one or two suggestions will certainly tend to preserve the witness from distasteful contests with counsel. I will venture the preliminary remark that the reputation of a physician or surgeon is seldom hurt or advanced by any thing that occurs in a court-room, unless it may be among members of his own profession. The fate of the prisoner, or the issue of the cause, enlists the spectators, and the peculiar discipline of lawyers will cause them rather to respect most those opinions that are advanced with reserve and caution. *Curia advisari vult* expresses the judicial mode, that upon important matters the court will take time to consider and consult. The like caution on the part of a medical expert in advancing an opinion in a court of justice, I am quite certain will not weaken the force of his statement, or the respect it receives at least among lawyers. And I see no reason why the suggestions offered by Professor White before your society on a former occasion were not sound—that a medical expert need not hesitate to say to a question propounded "I do not know;" or to declare that upon the facts presented or data given he cannot express an opinion, cannot undertake to state the proper inference.

It is certain that in the courts the assumption of familiarity with every thing belonging to the expert's branch of science, does not give weight to this testimony. In a criminal cause in this state, in which a number of eminent medical experts had testified on either side of the case, the court referring to the subject of what degree of credence should be given to the opinions of medical experts generally, said: "They have their theories and speculations, and the difficulty with them many times seems to be that they are hardly willing to admit that there is much in the human system, its ailments and diseases that is beyond their knowledge and comprehension."

An expert witness on the stand will make his examination comparatively pleasant by listening carefully to the question put to him by counsel, and when the question is understood, by responding to it with extreme simplicity of statement, but with that fair fullness which is the measure of candor, yet answering neither more or less than what is called for by the question. For, otherwise, if he volunteer, he will excite the jealous watchfulness of opposing counsel, provoke his onslaught, and debar himself from the protection of the court. For the *opinion* of a medical expert is to be given on the facts proven, or the hypothetical facts assumed for the purpose of taking his opinion thereon. If it appear from the answer that the witness has assumed or taken into the proposition a fact not given in the question, the utility of the answer is lost, for the court will not suffer an answer that is not responsive to the inquiry, to go to the jury. It is not the business of the expert to correct the formulae of counsel. If the expert sees that the counsel, from ignorance or otherwise, has omitted facts, or omitted data from the hypothetical case stated, in the absence of which no proper conclusion can be drawn, no opinion can be stated, his safer course is to say that he cannot answer the question as put. If the lawyer who acts as counsel is not able to collate the proper facts or data for the opinion, let him go without his answer. The court, however, on application will

usually allow the witness to explain why he cannot answer the question in the form presented.—*Concluded in June number.*

CLINICAL REPORTS.

EPITHELIOMA OF THE CERVIX UTERI—REMOVAL BY PROF. JAMES P. WHITE, M. D.

REPORTED BY WILLIAM D. GRANGER, M. D.

A FEW words in explanation of Dr. White's method of operating, and his ideas of epithelial cancer of the uterus, will without further comment, make clear the brief clinical history here reported. A few years ago the treatment generally taught for this disease, was the amputation of the cervix, or such part as is infra-vaginal, either by the *écraseur*, or the electric-cautery, or else an attempt was made to remove a more extensive tumor by the actual cautery or strong caustic preparations. These methods were applicable only in the early stages of the disease, and proved in the hands of the profession unsatisfactory. They failed to fully remove every vestige of the disease, and it soon returned with increased violence. It has been shown by microscopical study, that when the epithelial cancer is removed, and apparently healthy tissue is reached, there is in the neighboring normal structure of the uterus nests of cancerous matter, and an infiltration of cancer cells. It is necessary, therefore, not only to remove the tumor, but this diseased tissue beyond. With this end in view Dr. White has been operating for many years. Three years ago the reporter had the privilege of seeing him operate, and this principle was explained at that time. Before and since that time Dr. White has repeatedly operated for this disease, essentially in the same manner as is now reported, and with many permanent recoveries. One case, operated upon eleven years ago, has never had a return of the disease. But if the disease does show a tendency to recur, it does so as though

it was a new disease, slowly at first and from a small beginning, so that by examining the patient every few months, and removing these small growths, the disease can be held in check and a prolonged, and comfortable life assured to the sufferer. It is too early now to attempt to give accurate statistics and compare them with other methods. Both time and a large number of cases are required for this purpose. But the testimony of those who have adopted this method is without exception in its favor. The principle of the method is the entire removal of every trace of cancerous disease. This is to be done though it be necessary to invade the body of the uterus, and to carry your operation to the very vicinity of the peritoneum.

Case. Mrs. B., aged sixty-four; married; has had children; has had symptoms of the disease five years; there has been pain, much loss of blood, and failure in health. An examination showed a tumor of the cervix, including both lips of the os, extending into the vagina; the tumor on the anterior lip was the largest, it might be said to be as large as a fig; the tumor bled profusely when examined, almost hiding it, but it presented to the touch the characteristics of an epithelial growth of the so-called cauliflower variety. Patient was operated upon March 3, 1880, by Dr. White; a large, but short, round glass speculum was introduced; the soft projecting part of the tumor was broken down and scraped away with Sims' curette; this was continued until every sign of disease as far as the internal os was removed, and apparently healthy tissue was reached; the finger was introduced to search for any indurated masses of cancer in the healthy structure of the uterus, and such as were found were removed; the hemorrhage during the operation was checked by the use of pure vinegar; the removal of the mass on the anterior lip brought the operator's instrument near to the peritoneum; having removed all the cancer which could be found, the actual cautery at red heat was applied, which served two purposes: first, it stopped all bleeding; and second, it caused a slough to be formed, by which it was hoped to bring away all tissue in which

there was the slightest trace of disease; a tampon of styptic iron, glycerine and cotton wool was applied, and the vagina was packed with a tampon; 1-6 gr. of morphine was given before, and 1-6 after the operation; the patient was susceptible to morphine, and although she suffered much pain, 1-24 of a grain was all that was necessary to quiet it; after a few days the tampon was removed, and the slough coming away left a healthy granulating surface, this gradually healed; on March 20th, to get greater security against a return of the cancer, fuming nitric acid was applied; this healed rapidly, and April 1st the patient was discharged, at which time the whole surface was apparently healed, and there was no discharge; the next day after the operation the temperature was 103, which was the highest point, and eight days after both pulse and temperature were normal; injections of carbolic acid were made into the vagina from the first, and nutritious food and tonics were given; the patient was directed to report every few months; the patient was much improved in her general health when discharged.

HOSPITAL NOTES.

REPORTED BY DR. FREDERICK PETERSON, HOUSE PHYSICIAN AT THE
BUFFALO GENERAL HOSPITAL.—SERVICE OF DR. C. C. F. GAY.

SARCOMA OF LEFT WRIST.

NELSON SINE, entered Hospital, April 15, 1879; single; age 28; American; brakesman; joint of left wrist swollen, and discharges from back a thin brownish fluid; sprained the joint five months before; flax-seed cataplasms were applied.

April 19. Dr. Gay cut down upon back of carpus, through a cineritious and suspicious-looking tissue; operation under ether; carpal bones found unusually soft; bandaged with sponge in wound as compress.

April 21. Immersed hand in water at temperature of 100°, until

May 3d. Hot fomentations ordered.

May 10. An abscess has formed in front of carpus; opened it to his relief.

May 29. Found it necessary to amputate fore-arm three inches above wrist. That the operation was required, a number of other members of the staff believed. Specimens from the carpus and sections even of portions of the healthy-appearing flaps showed the presence of the round cells of this form of sarcoma under the microscope. Ordered Fowler's Solution gtt. iij. three times daily. Stump healed remarkably quick, and patient grew ruddy and full-faced under generous diet.

June 23. Discharged in perfect physical health; stump a very handsome one. It is said, however, that quick healing is a characteristic of sarcoma, and that it is sure to return.

COMPOUND COMMINUTED FRACTURE OF THE CRANIUM.

JAMES KING, enterprising newsboy, walked into the Hospital, June 12, 1879; age 14; American; his mother accompanied him and said his head had been injured, she thought not badly; examination brought to light a fractured skull; a brick had fallen some forty feet, striking upon the upper portion of the occipital bone, as he was stooping over. Dr. Gay was summoned, and elevated and removed 9 fragments of bone from the wound, under ether, leaving a clean cut circular hole in cranium one and one-half inches in diameter; Dura Mater shone beneath uninjured; the boy was not, nor had he been, at all unconscious; after operation wound was stitched up, and cold water compress applied.

June 13. Patient a little delirious; takes milk and beef tea.

June 15. Has the sort of delirium called muttering; wound bleeds.

June 16. Removed stitches, giving egress to a quantity of coagulated blood which had collected under the closed lip of the wound, and had been pressing upon the cerebrum; consciousness and sanity soon returned as expected.

June 20. Wound healthy and healing slowly; goes out doors and has returned to the various amusements known to boyhood; pulsation of posterior lobe visible under membrane which has grown over opening.

Aug. 2, 1879. Discharged, recovered, and is as astute and vociferous as formerly.

TRANSLATIONS.

TREATMENT OF CLUB-FOOT BY EXCISION OF BONE FROM THE DORSUM PEDIS, BY PROFESSOR KOENIG, IN GOTTINGEN.

FROM THE GERMAN BY HERMAN MYNTER, M. D.

THE author recommends a new operation for pes varo-equinus in cases in which it is impossible to cure the deformity by aid of tenotomy, and forced reduction. He has performed the operation in three cases, of which two recovered, while one died of heart disease before the wound had closed. The ages of the patients were 12, 13 and 19 years. The operation was performed strictly antiseptically, and consists in excising a wedge-shaped part of the metatarsal bones through longitudinal incisions on the outer part of the dorsum pedis. His conclusions are as follows:

1. A wedge-shaped excision of the dorsum pedis is the surest and least dangerous method of correcting neglected and useless club-feet, no matter whether congenital or paralytic. To amputate such feet is scarcely any longer justifiable. It is safer than violent reduction, which has been followed with gangrene.
2. The wedge-shaped excision must be made from dorsum pedis with due regard both to the adduction of the foot (pes varus) and to the hyper-extension of the foot (pes equinus) so that the base of the wedge must be relatively on the outer and

dorsal, and on the dorsal side of the foot. In cases of congenital club-foot we must generally remove the head and neck of the talus and the cuboid bone, and if the foot is bent together (plantarflexion) the os naviculare. In paralytic club-foot the wedge must be excised farther forward. Remove first a little wedge from the outer side, either with knife or chisel, and afterwards remove the bones in the middle of the dorsum pedis. It is not necessary to consider the joints except the tibio-tarsal joint.

3. Longitudinal incisions are preferable when made over the most prominent point. Transverse incisions give perhaps more space, but endanger the tendons, and favor, in paralytic feet, sloughing of the skin. If one incision is insufficient, another may be made parallel with it. It is sometimes of advantage to make tenotomy of the Achilles, and sometimes the plantar aponeurosis must be cut.

4. It is best to remove enough that the deformity may be overcome without the aid of bandages. The antiseptic treatment must be used in all its rigor; the operation is easier, if Esmarch's bandage is used.—*Centralblatt fuer Chirurgie*.

SELECTIONS.

ABORTION AND ITS TREATMENT: WITH SPECIAL REGARD TO THE INJECTION OF WARM WATER.

BY J. FLETCHER HORNE, F. R. C. S. EDIN.

WARM-WATER therapeutics within the last two years have received considerable attention.

By reading a short paper by Dr. Atthill I was led to its use in abortion.

By the term abortion I imply the expulsion of the foetus prior to the sixth month of pregnancy; I use it as synonymous with the popular expression—miscarriage.

Abortions of early pregnancy seldom need special treatment. The hemorrhage will usually be controlled by rest. Astringents may be tried if needful, or ergotine may be exhibited hypodermically.

In abortions of the eighth to the twelfth week we often have the ovum expelled with the unbroken membranes; if it be not, our aim must be to remove the ovum and its appendages, and thoroughly evacuate the uterus.

The uterine contractions suffice, in many instances, to burst the ovum and throw out the foetus, and here the uterine action may cease; the pains do not recur as we could wish, the womb continues quiescent, the os almost closed, and the placenta and secundines remain. After a variable interval, from a few hours to as many days, the uterus will probably attempt to rid itself of its contents—often successfully.

Should there be no return of the pains, I think it desirable that immediate removal should be attempted. If the finger can be introduced, and pressure made outside the abdomen, the whole of the cavity of the uterus should be thoroughly explored and evacuated. If the os is closed it should be plugged with a tent, or Dr. Aveling's vaginal tampon will be found useful. The placenta, if retained, will usually become the seat of putrefactive change, as the following case will show:

Mrs. R., multipara, attended by midwife, who, having delivered a putrid foetus and being unable to complete the removal of the placenta, asked me to see the patient. I carefully endeavored by the finger to remove the soft, pulpy, rotten mass to the greatest extent possible. No hemorrhage followed, but considerable pain. The foetid discharge was kept down by Condyl's fluid injection, and I several times removed further pieces. The case dragged on a weary existence for many months, and when the patient left the district she was far from well.

I now think that where a portion of the placenta remains, and you cannot reach it with the index finger, the use of the warm water steps in in preference to the use of the ovum forceps.

The tent or tampon will dilate the os and stimulate the uterine efforts. After its removal you will be able to scoop out the ovum and its surroundings.

In these cases I have frequently given ergot in its various forms, and have almost always felt disappointment at the result. Its action on the unstriped muscular fibre of the uterus, so well marked when the organ is fully distended, and the os fully dilated, is certainly not nearly so useful in the middle period of pregnancy. I find it produce tonic contraction of the os, and so act in a manner diametrically opposite to our desire. At the same time I would state, that I think it most desirable, after the whole of the contents of the uterus have been expelled, to stimulate the sympathetic system by the administration of ergot, so as to bring the arterial tree into a state of spasm, which closes the minute arteries, and prevents secondary hemorrhage.

It is a moot point whether absorption of the placenta occurs; if so, it explains the following case:—

Mrs. C. sent for me August 19th, 1879. Messenger said miscarriage. On arrival I found a fœtus of about twelve or fourteen weeks had come away. I carefully examined the clots, &c., for placenta. On vaginal examination found the small cord broken off almost in the closed os. On a little tension it again broke. There was no pain, no hemorrhage; nothing further came away, and in a few days, on my last visit, I found the patient in her shop.

In using the warm water I use an ordinary hand-basin, containing about three or four pints of the water at a temperature of 110° or 112°. I would here strongly recommend any of my readers who would use this plan not to use their clinical thermometer; if so, they will find that they will not be able to again shake down the index. I find it a safe limit to use water sufficiently warm that you can hold your hand in it without any degree of discomfort. The basin is placed close to the nates, and one of Higginson's enemas, with vaginal tube attached, is carried up with the fingers through the os uteri, the water is

then to be gradually injected until complete contraction follows—usually one or two pints suffice.

I append three cases of abortion in which I have used the warm water with complete success. In one case of post-partum hemorrhage at term in which I used it, the warm water was not so successful.

CASE I.—Mrs. D., aged forty, sent for me on the night of April 7th, 1878. I subsequently learned that she had had nine children, and found that she had missed three menstrual periods, and ten days before had begun to be unwell; and this had continued without treatment till this afternoon, when a foetus of about the eighteenth week of pregnancy came away. This was followed by profuse hemorrhage, which was succeeded by fainting and tossing of the arms about—symptoms so characteristic of the drain that had taken place. On my arrival I found her almost pulseless, blanched, the bed saturated with blood, vagina full of clots. By introducing the index finger through the partially dilated os uteri, and with external pressure I got away a portion of the miniature placenta, but the hemorrhage still continued. I then injected gradually about two pints of warm water, with the result of bringing into reach the rest of the placenta, and also producing immediate contraction of the uterus, my finger being expelled by the uterine action.

CASE II.—Mrs. B., a very delicate woman, aged about forty, pregnant of her seventh child, was delivered August 24th, 1879, at 7 P. M., of a foetus of about the fifth month, which apparently had been dead some time. The placenta came away by external pressure on the uterus. Three hours after, her attendants having tilted her up, violent hemorrhage followed, which drained the woman almost to death's door. On my arrival I immediately injected warm water with success, the hemorrhage ceasing immediately.

CASE III.—Mrs. W., aged thirty-eight, pregnant of her twelfth child, aborted October 15th, 1879. A foetus of about the third month came away about 2 P. M. At 9 P. M., on my seeing her,

I found she had been losing all day, had fainted several times, was blanched and pulseless. On my injection of warm water collapse followed at once, and the patient turned over as if about to die, but immediately rallied. Contraction of the uterus ensuing almost immediately, a dose of ergot was given; slight discharge continued all night. Nourishing food and tonics were subsequently given, and the patient soon became convalescent.

Physiologically this treatment brings out the nervi-motor power—the reflex action being stimulated by the warm douching and by the impression upon the internal uterine surface, and perhaps upon the uterine muscular fibres. By the administration of ergot after the abortion is completed, the direct spinal action is also stimulated, and no further hemorrhage takes place.

—*Obst. Journal of Great Britain and Ireland.*

GENERAL AND HYGIENIC TREATMENT OF FIBRINOUS CROUP.

BEFORE the German Medical Association, held at Baden-Baden, September, 1879, Dr. C. Rauchfuss, of St. Petersburg, states that by this term he means the so-called "Laryngitis Diphtheritica," which, so far as its cause is concerned, is probably always of diphtheritic origin, but in which there is an absence of other local and constitutional signs of infection. The danger in these cases, to be sure, lies in the extension of the inflammation to the trachea, bronchi, and lungs; but this is very frequent. Were it not, we should, with tracheotomy at our command, rest comfortably assured of victory over most cases. In this discourse, however, we are not to consider the general treatment of diphtheria, but only of a fibrinous inflammation of the membrane of the larynx. Speaker gives a short sketch of the histology of the disease, and points out that it is especially the prolongations of the false membrane, the fibrinous tissue, into the orifices of the mucous follicles which form the strong attachments, and cause the adhesion between the false membrane and the mucous tissue beneath. The accumulating secretion of

the mucous glands loosens and forces out these prolongations, the false membrane is undermined and cast off. We cannot but think that, if we could in practice greatly increase this secretion-pressure, and moisten and soak the membrane, we could accomplish a rapid resolution of the inflammation. This has been attempted mostly by the use of mercurials and antimonials. Speaker has used both of these for many years and with very good results. The action of the drugs in softening and loosening the membranes was so decided and prompt that, in a long list of autopsies, it was possible to pick out the cases where they had been used. Speaker now asks if we cannot attain the same results in a simpler and better way, namely: by any means which cause a great increase of mucous secretion and a soaking of the tissues. This he claims may be done by hydropathic treatment, both external and—so to speak—internal. His method is as follows: In the first place, a methodical, continuous, and large supply of water to the blood, in union with alcoholics; a mixture of water, sugar and cognac, lightly warmed, is given to the children in doses of from 100 to 200 grams every half to one hour. It is easy to give three to four litres a day, not counting other nourishment. The quantity of cognac is regulated by the age, pulse, etc., but in general is large. Besides this, the external hydropathic means are used—packings, drenchings, washings, etc., *very* frequently repeated.

R. claims that, under this treatment, all the membranes we can see externally become moist, the cardiac and respiratory action easier, and the cough looser. Who has not, after taking some warm tea or a hot punch, to “cut short a cold,” experienced the benefits of the *sweating* of the membranes? Simple as it seems, R. claims that in the treatment of croup, this use of water, assisted by good alcoholics, cannot be too highly estimated.

Leaving out of view any general treatment for diphtheria or surgical interference for stenosis, his programme of treatment for a child with fibrinous croup is:

1st. Fresh air and good nourishment—few persons in the room, good ventilation, nourishment mostly with milk.

2d. The use of stimulant and hydropathic procedures to regulate the temperature, pulse, and respiration.

3d. Increasing the watery transudation upon and in the diseased membrane, and exciting increased mucous secretion by the use of the drink above described.

This use of the water is usually sufficient to keep the air of the room moist, but, if crusts or scabs form on any membranes, this moisture must be increased by steam. In connection with this, he uses disinfecting inhalations, and avoids anything mechanically or chemically irritating.

R. claims that his results by this method have been fully as good as by the mercurial treatment, though in a few severe cases he has combined the two. It, at least, has the advantage of being a carefully laid-out plan of proceeding, and guards against placing too much reliance on any one so-called "energetic" remedy.—*American Journal of Obstetrics*.

ASTRINGENTS IN CHRONIC CONJUNCTIVITIS, BY

DR. F. M. WILSON, BRIDGEPORT, CONN.

THE treatment of a chronically inflamed conjunctiva, is often tedious both to physician and patient. A prominent part of this treatment usually consists in the use of some one of the many local applications. With the design of ascertaining what applications were most preferred, circulars were sent to members of the State Medical Society and of the American Ophthalmological Society, and to about half a dozen medical friends not members of either. One hundred and two opinions have been received from general practitioners and forty-one from specialists.

Twenty-two different drugs were mentioned. The following tables contain the more important ones, and the numbers who claim for each first rank :

1. *General Practitioners.*

Argenti Nitras, ...	38.
Zinci Sulphas, ...	32.
Cupri Sulphas, ...	15.
Plumbi Acetas, ...	5.
Alumen, ...	3.
Other drugs, ...	9.

 102.
2. *Specialists.*

Argenti Nitras, ...	18.
Cupri Sulphas, ...	10.
Alumen, ...	4.
Zinci Sulphas, ...	2.
Other drugs, ...	4.
Uncertain, ...	3.

 41.

As will be readily seen, there is a preference for argenti nitras, both on the part of general practitioners and also of specialists. Table 2d is especially significant, representing as it does the treatment of many thousands of cases. The most noticeable difference between the two is the greater number of general practitioners who, with Drs. Roosa, of New York, and Strawbridge, of Philadelphia, prefer zinci sulphas.

The inquiry also brought out an important difference in mode of application.

A majority of general practitioners depend chiefly upon collyria, which they rely upon the patient to drop into the eye.

Specialists, as a rule, place their chief dependence upon stronger applications, which they never trust out of their own hands.

ADDITIONAL EVIDENCE CONCERNING PARTICULAR DRUGS.

Argenti Nitras.—Eight specialists consider it "unquestionably superior to any other astringent."

Dr. Green, of St. Louis, goes farther; he says, "Can do all with arg. nit. that I can do with *all* the others."

Dr. Webster, of New York, thus excellently summarizes a method of its use: "I more often use a ten-grain solution of arg. nit. than any other astringent. I apply it by a small mop of absorbent cotton twisted about the end of a dentist's cotton-holder or a slender piece of wood. In mild cases I apply the solution to a very small area of conjunctiva of upper lid, usually a little at the inner and a little at the outer end, where the redness is greatest. In severer cases I apply it to a still larger area, and in trachoma I apply it very thoroughly over the whole conjunctiva of upper and sometimes of lower lid. In all cases I neutralize with salt water before restoring lids to place."

Advantages.—1. Can produce with it any effect from the mildest astringent to the most powerful caustic. 2. Above tables show a greater percentage of success with it than with any other application. 3. It is painless except in strong solutions, or "mitigated stick," and even then can be rendered so by immediate neutralization with salt water.

Disadvantages.—1. It stains everything, even the conjunctiva sometimes, when used for a long time. 2. If injudiciously used it seems to do more harm than any other applications. 3. After long use scars of the conjunctiva are more apt to follow than after the use of other applications.

Cupri Sulphas.—Four specialists consider it "unquestionably superior to any other astringent."

Used in solution, but oftenest in solid crystal.

Very smooth and lightly applied to everted lids, as seen by table, ranks next to arg. nit. among specialists, and even among the advocates of the latter is sometimes chosen where conjunctiva is thin, and special liability to scars seems to exist. It is very convenient, and always ready for use. Its application is quite painful.

Alumen.—Used in crystal and in solution, 3i. to water Oi.—suitable only for mild cases; crystal causes sharp pain, but for a few moments only.

Zinci Sulphas.—Used only in solution, grs. i.–v. to water ℥i. A great favorite as a collyrium, both among general practitioners and also with specialists as far as they use collyria.

Hydrargyri Oxidum Flavum (grs. ii. to vaseline ℥i.) is preferred by Dr. Seely, of Cincinnati, in trachoma, and in “all cases of chronic conjunctivitis,” by Dr. Murdoch, of Baltimore.

Formula—℞ *Zinci Sulphatis*.

Cupri “

Ferri “

Aluminis, aa ℥i.

Dr. Holmes, of Chicago, prefers a saturated solution of the above for severe cases, and various solutions for the milder cases. Has used it largely and with great success. Solution is unstable.

Tannin.—Dr. W. S. Little, Philadelphia: “For chronic conjunctivitis without trachoma, tannin; for trachoma, tannin and copper. Along with tannin I generally insufflate calomel. Tannin and calomel are the principal articles which I use at the clinic and in private practice.”

Plumbi Subacetas.—Dr. F. Buller, Montreal, Canada: “On the whole I think Plumb. Subacet. acts better than any other astringent.

The solution I employ is,

Liq. Plumb. Subacet., ℥i.

Aquae dest., ℥iii.

always applied by the surgeon himself to everted lids, and washed off with water.”

Several correspondents say that they should use lead more were it not for its dangers; but the only danger mentioned is its liability to form deposits in corneal ulcers.

In addition to these eight favorite methods of treatment, fourteen other methods were mentioned with more or less favor.

Truly, here is not lack of material, and to sift that already on hand would be as profitable a task, perhaps, as to add to it.

In looking over the above evidence one conclusion is inevitably forced upon a candid mind, viz.; that there is no specific for chronic conjunctivitis.

Of course every observant man must by long practice acquire increased facility in the use of local applications, and must of necessity receive many impressions as to special indications, but no one as yet has placed them in such a form that any considerable number of specialists accept and act upon them.

Quite often, then, in commencing the use of local applications, but two courses are open :

1. Pure empiricism.
2. To have some favorite which on the whole seems to meet the largest number of cases.

Finally. The principal conclusion of the above inquiry is, that argenti nitras will meet a larger proportion of cases than any other local application.*

I return my sincere thanks to the gentlemen who have kindly furnished the basis of the above report. Many of the answers received are the summing up of twenty years' experience and over in special practice, and as such deserve publication in full. The necessity of brevity, however, will not permit.—*Proceedings of Connecticut State Medical Society, 1879.*

TRACHEOTOMY FOR DIPHTHERITIC CROUP.

DR. FITZAN (*Berlin. Klin. Wochenschrift*, 1879), within two years, has performed tracheotomy for diphtheritic croup in thirteen cases, with twelve cures. One of these was in a child, only twenty months old. The patient who died was operated upon in extremis and died during the operation. The extremely favorable result is ascribed by the Doctor to the following precautions: First, that both, before and after the operation, he absolutely avoided all depressing therapeutics, and used tonics and strengthening remedies; second, that he caused the patients to diligently inhale, through throat and canula, a one-half per cent.

* All the local applications mentioned are not astringents; all are irritants, and some have caustic properties, but their practical value has been sought rather than their classification. The removal of any active cause for the conjunctivitis, *e. g.*, poor general condition, errors of refraction, strictures of lachrymal passages, etc., must of course precede any local application from which success is expected.

solution of salicylic acid of a temperature of 28 to 30 ° R. He continues these inhalations after the operation in even the most hopeless cases. He does not operate in septic-gangrenous cases. —*Am. Journal of Obstetrics.*

CATARRH OF THE BLADDER; ALBUMEN IN THE URINE.

BY SIR HENRY THOMPSON,

Surgeon Extraordinary to His Majesty the King of the Belgians; Consulting Surgeon to University College Hospital; and Emeritus Professor of Clinical Surgery.

THERE is a group of symptoms frequently met with in men of advancing years, to which I desire especially to call your attention. One of the first circumstances to attract notice is that the urine is more or less cloudy when passed, and that on standing it deposits some adhesive opaque matter in the bottom of the vessel. Such urine is generally neutral, or at best faintly acid; occasionally it is alkaline, always becoming so rapidly by keeping. On interrogating the patient, you learn that the act of micturition is performed rather more frequently than natural—that he is disturbed by it two or three times in the night, and every two hours or so during the day. He may also complain of dull pains about the pelvis and back; he finds the effort to pass water rather greater than it formerly was, and the general health has of late suffered a little.

Now it is by no means uncommon to hear this group of symptoms spoken of as indicating the presence of a “catarrh of the bladder.” And catarrh of the bladder is very generally regarded as a particularly obstinate, sometimes indeed as an incurable, affection. And I am free to confess that as long as those phenomena are considered referable to a specific disease, “catarrh,” so long probably will the disease prove rebellious to treatment and sometimes even incurable.

Again, when the urine described is examined by the microscope, a quantity of pus varying much in different cases, is seen to be present in it; and when examined by heat and nitric acid, a certain amount of albumen is, as a matter of course, deposited.

It happens to me, in the course of consultations, to observe that these phenomena—the admixture of pus with the urine and the presence of albumen—are, singly or together, frequently regarded in themselves, and apart from other facts, as necessarily presenting indications of very grave importance. Are they so?

Certainly they are by no means necessarily grave; on the contrary, in the great majority of cases of elderly men, the presence of these products is not grave. Let me demonstrate to you the marked distinction which exists between the significance which albumen possesses in two different categories of cases. I can scarcely ask your attention to a matter of higher practical importance.

1. When a patient's urine, habitually clear, acid, and free from the faintest blood-tint, throws down to the test of heat and nitric acid a notable quantity of albumen, the source of that albumen is the renal circulation, and, if persistent, the case is almost certainly one of grave import. The presence of organic change in the kidney structure is to be inferred, and other evidence of its existence, if sought for, will probably be found.

2. A very slight admixture of blood in any urine, no matter what the source of the hemorrhage, will produce a considerable deposit of albumen. It is evident, then, that the product in such cases, although sometimes grave, is not necessarily so, and that it may furnish an indication of the slightest possible import, inasmuch as a little blood may appear in the anterior passages, from a lesion which is slight and temporary in its nature.

3. Pus in the urine may, and most commonly does, proceed from some local condition of the bladder, occasionally, indeed, from local inflammation of the urethra. Nevertheless, albumen will be deposited on applying appropriate tests. It is evident that albumen, resulting simply from pus produced by chronic cystitis, has an import vastly less grave than that described above as No. 1, being a purely local and mostly temporary affection of an organ which has no vital function, but merely a mechanical one; the albumen in the former instance being evidence of dis-

organization in the structure of a vital organ—that is, one the sufficient action of which is essential to the very existence of the body.

In short, there ought not to be the slightest temptation to confound two states so utterly unrelated as the two states which we have here contrasted, although they offer from one point of view an accidental similarity—that is, there is in both an admixture of albuminous material in the urine.

Still, nothing is more common than to hear, in connection with a case of purely local bladder affection, the remark gravely and significantly made, “I assure you I have, on several occasions, found by testing a large quantity of albumen in the patient’s urine.” It is a little difficult sometimes, although necessary, to listen to such an observation with quite sufficient patience. Does the observer really desire to intimate that the patient has constitutional albuminuria, *i. e.*, some form of Bright’s disease? If not, his remark is simply devoid of meaning; since, as we know, there is vesical pus in the urine, we know equally that the albuminous constituent must appear on applying the test. And vesical pus in the urine certainly has no more relation to constitutional albuminuria than pus which comes from an external abscess or surrounds a common boil. Simple as all this may appear to you and to me, it is quite astonishing how much confusion there is in men’s minds in regard to this matter, and how much importance some persons attach to all albumen found in a urinary test-tube, although the source of the deposit may be easily demonstrated to be the bladder, and no other part of the organs which lie above it.

Finally, the important practical point in relation to treatment is first to ascertain the occasion of the local catarrh. In nine out of ten of these cases it consists in inability, often only to a slight extent, on the part of the patient to empty the bladder completely. The universally acknowledged cause, hypertrophy of the prostate, is, of course, the first in order of frequency. But after this are others not infrequent. Defective action may be

due, first, to simple atony, the result of past habitual or occasional over-distension of the bladder with urine; secondly, to thickened and incompetent muscular parietes of the bladder after chronic inflammation, sometimes associated with old stricture; thirdly, to defective innervation seen in connection with other slight signs of impaired function in a nervous centre; the last being, of course, the most serious of all, in its nature and probable results.

In all of these, local treatment, by carefully removing all the secretion by means of a soft catheter two or three times a day, perhaps aided by gently washing out some remainder, is the chief efficient remedy. Remember that this incompetence of the bladder is always to be sought for by physical examination; no other form of evidence in relation to it, as the patient's sensations, etc., is to be accepted as trustworthy. The introduction of a soft catheter immediately after the patient has passed water by his natural efforts, is the only test, and it should be applied on two or three occasions before arriving at a definite conclusion. The causal relation between the group of symptoms enumerated at the outset, and the defective function described, is far more common than it is generally supposed to be. It is on this account, therefore, that I have asked your attention specially to the subject.—*London Lancet, April, 1880.*

THE PRESENCE OF ALCOHOL IN ANIMAL TISSUES.

To clear up some points hanging on the investigations of Schrader and Dresch, the following experiments were tried by J. Bechamp. (*Compt. rend.* 1879, lxxxix 573.) A piece of horse flesh, weighing three kilog., was dipped in boiling water for ten minutes, and placed in a dish on the 8th of June, and closely covered up with a thick linen cloth. On the 16th of July, the flesh had become very foul and full of life, but the air does not appear to have penetrated to the centre. Alcohol, amounting to 0.8 gramme was obtained, a part of which was

burnt, the rest oxidized with chromic acid to aldehyde, and then to acetic acid, the soda salt of which was prepared and identified. In addition to this, about ten grammes of sodium acetate, butyrate and salts of other higher acids were obtained. Another mass of horse flesh, weighing four kilog. was simply left to itself for four days, and a subsequent treatment yielded alcohol as before, but in less quantity, as well as acetic and butyric acids. The next question which suggested itself to the author, was to determine whether alcohol forms a constituent of a living organ. It has been shown by A. Bechamp, that alcohol is a normal constituent of urine and milk; the question, hence, arises whether it also occurs in the tissues. Fresh sheep's liver, immediately after the animal was killed, contained alcohol; fresh and still warm sheep's brains also contained it, and in larger quantity than the liver; fresh and still warm bullock's brains also contained it. These results show that the presence of alcohol in the tissues does not necessarily indicate poisoning.—*Popular Science Review*, January 1880.

THE THERAPEUTIC VALUE OF PULSATILLA.

PULSATILLA is rapidly growing in favor with many practitioners. Though a very old remedy, having been known to Dioscorides and Pliny, it fell into disuse and was not reinstated till the beginning of the present century.

I have used pulsatilla mainly in simple dysmenorrhœa, where it has proved of decided utility. Its scope is, however, doubtless much wider. A very prominent lawyer of this city told me not long since, that after trying the bromide, valerianates and other remedies of repute for the headache caused by excessive mental application, he found no relief till he made use of the tincture of pulsatilla. He is now never without it, and uses no other medicine for the cure of his headaches, which I know to be very severe. The tincture should be made from the fresh leaves and given with caution. The dose is from 3 to ten drops.—*Dr. Tucker, in the Chicago Medical Gazette.*

NITRO-GLYCERINE.

ALL of our readers are familiar with the *powerful* properties of this compound, but few are aware that its potency as a curative agent under the less alarming title of glonoin, is coming rapidly into favor as a powerful but temporary stimulant, both to the circulatory and nervous system. Its properties have been fully investigated by DeVritj, Muller, Mills, Defore, and others. It is freely soluble in alcohol and ether, and has a sweet, pungent, but not unpleasant taste. It is best dispensed in a one per cent. solution, of which from 5 to 20 m. may be administered at a dose.

A writer in the *British Medical Journal* says: It has been found that the effects of nitrite of amyl and nitro-glycerine on the pulse are similar. Both produce a marked dicotism, and both accelerate the rapidity of the heart's action. They differ, however, in the time they respectively take to produce these effects. The full action of glonoin on the pulse is not observed until from two to six minutes after the dose has been taken; while in the case of nitrite of amyl the dicotism appears in from 15 to 20 seconds after an inhalation, but its effect is transitory, being maintained for only a very short time. The glonoin acts more slowly, but the pulse does not resume the normal character for nearly half an hour.

TREATMENT OF GOITRE BY CHLORIDE OF AMMONIUM.

DR. STEVENS, of Dunham, Canada, states that he has employed chloride of ammonium in the treatment of seven cases of common goitre, or simple hypertrophy of thyroid gland, with most surprising and satisfactory results. Six of the patients were girls under twenty years of age, and all of them were entirely cured after about three months of treatment. The seventh case was that of a married woman, aged forty, and the mother of several children. The tumor in this case was of enormous size, and the patient suffered a good deal from disturbances of

respiration and circulation. She took the chloride two or three months, and at the end of that time the bronchocele was reduced one-fourth in size, and all the circulatory and respiratory symptoms were relieved. Treatment was discontinued, because she became pregnant. The dose used in all the cases was ten grains three times a-day, but Dr. Stevens thinks, larger doses might be useful in old cases. No other medicine or hygienic treatment was combined with the chloride of ammonia. In the cases of the six girls, the tumor had made its appearance about puberty, but in none of them was there any evidence of menstrual derangement or uterine disease.—*Canada Med. Record*, Feb. 1880.

ABSORBING POWER OF WOUNDS.

M. MAAS, of Fribourg, has made a series of researches on the absorbing power of wounds, and the results which he has arrived at are partly opposed to the opinion admitted up to the present. A wound cauterized with the hot iron, nitrate of silver or nitric acid, absorbs like an intact wound; the absorption is much more rapid if the wound has been in contact with carbolic acid, as in Lister's dressing; it is nil in cases of cauterization with chlorate of zinc. In wounds treated openly, a crust is formed which at the end of six hours is unpermeable; it becomes so only at the end of three days if the wound has previously been covered over with a wet dressing.—*Le Prog. Med.*

TOLERATION OF MORPHINE.

DR. F. POWERS, of Westport, Conn., writes that a woman about sixty years old entered a drug-store in the town a short time ago, and called for forty-five grains of morphine. The druggist weighed it out; she then called for a glass of water, put the drug in it and swallowed the whole. The anxiety of the druggist was somewhat relieved by her saying that she had taken morphine for forty-five years, and that forty-five grains was now her regular dose.—*Medical Record*.

PRODUCTION AND INCREASE OF SECRETION OF MILK BY THE
RICINUS COMMUNIS.

MM. Boncher and Foussagivis have established the efficaciousness of this method of increasing or re-establishing the secretion of milk. It is used thus: a handful of the leaves of the ricinus communis are boiled in a litre of water. The breasts are bathed with the decoction for 15 or 20 minutes; there is then applied to the nipples a poultice made with a part of the same leaves, and they are left on till they become dry. The result is obtained after a few hours; but if the secretion is very tardy, we may add to this the employment of fumigation of the boiled leaves directed to the genital organs.—*Medical Press and Circular*.

TRACHEOTOMY FOR CROUP.

THE following conclusions are reached in an exhaustive paper on the subject in *Gaillard's Medical Journal*, January, 1880:

1. That tracheotomy is per se almost devoid of danger.
 2. That fatal hemorrhage should almost never occur, and care with coolness will nearly always prevent opnoea from intracheal bleeding.
 3. That age offers no contra-indications, although the average of success is less in early infancy and adult life.
 4. That early operative interference, whenever the paroxysms of dyspnoea become at all lengthened, is demanded, since delay only adds to the suffering of the patient, and materially lessens the chances of recovery.
 5. That the after-attention is of prime importance; careful attention of the wound, proper treatment of the disease, and proper nursing with fair hygienic surroundings, being the essentials to a successful issue.
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WINE is the work of God; drunkenness is the work of the devil.—*St. John Chrysostom*.

NIGHT MEDICAL SERVICE.

A NIGHT medical service is now in operation in Paris, and in several of the large cities of Europe. It consists substantially in registering the names and addresses of those physicians, who are willing to do night service at the Police stations, so that strangers or those who are without a family physician, or those who wish to obtain a medical man in an emergency, can go at once to a station and be accompanied by an officer to the residence of the physician. The officer then goes with the Doctor to the residence of the patient and also escorts him on his return, and subsequently presents the bill, which, if the patient is unable to pay or cannot be found, is returned to the city, to be paid by the government, the fees being regulated by law.

GRATUITOUS SERVICES TO CLERGYMEN.

IN regard to charging the clergy for medical services, the following resolution was adopted at the meeting of the Allegan County, Mich., Medical Association, July 26, 1877:

"Resolved, That the custom of giving our professional services to clergymen and their families gratuitously is unjust to a large class of our patrons, whose incomes are much less than the average incomes of theirs, and that we will hereafter adopt the practice of charging them the same as others."*—Med. Record.*

THE THERMOMETER IN TREPHINING FOR EPILEPSY.

ACCORDING to the *Broca*, in deciding the question of trephining in epilepsy from convulsions, etc., occurring in a patient who has a depression of the skull resulting from a previous fall or blow, the thermometer will settle our doubts. If the temperature is raised on the injured side, the effects are due to the lesion, and the depressed fragment must be raised; in the contrary case, the symptoms are not due to the lesion, and operative interference is contra-indicated.—*Medical Record.*

CHLORATE OF POTASH IN THE HÆMORRHAGIC DIATHESIS.

BY A. HARKIN, M. D., BELFAST.

CHLORATE OF POTASH, which is prescribed by the profession for a variety of diseases—such as scarlatina, throat-affections, low fevers, blood-poisoning, etc.—has qualities deserving a much wider application; and will yet, in the opinion of the writer, founded on extensive experience, be recognized as a potent remedy in the treatment of maladies depending on suboxidation, on defective nutrition, secretion, excretion, aeration, and molecular metamorphosis. Being mainly composed of oxygen and potassium, each of which is essential to the genesis of healthy blood, its chemical properties commend it to our consideration. In the hæmorrhagic diathesis, which is characterized by a diminished proportion of fibrin, a soft clot, an absence of the buffy coat, accompanied with a delicacy of structure in the capillaries and minute vessels, a remedy is required that shall increase the fibrin, add to the plasticity and chemico-vital elements of the blood and restore its coagulating power, as well as the contractile action of the capillaries; and thus destroy the dyscrasies, in which a slight wound may lead to excessive hæmorrhage, a trifling contusion to extensive extravasation. That this salt, whether given alone or in combination with iron, possesses the very desirable property of controlling the various developments of the hæmorrhagic diathesis, and that its persevering administration will neutralize the constitutional taint on which these ailments depend, Dr. Harkin hoped to establish by the relation of satisfactory cases, selected from an experience of its value extending over more than twenty years' observation. He generally ordered the medicine in the form one ounce of a saturated solution three times daily—one ounce of the salt to a pint of water; and, if iron be required, an addition of one drachm of the muriatic tincture to the solution completes the mixture.

Administered in this proportion, Dr. Harkin has had the greatest satisfaction in the treatment of epistaxis; in hæmophilia; in hæmorrhage from the bowels, from the kidneys, from the lungs, from the stomach; in menorrhagia; in scurvy; and in purpura hæmorrhagica.—*British Medical Journal*.

DEATH FROM NITROUS OXIDE.

A DEATH from inhalation of nitrous oxide gas occurred lately at Exeter, England. The gas was given to produce insensibility during the extraction of a tooth. The patient was a woman of about forty years of age. After a few inhalations the pulse was noticed to become weak, and the administration was stopped for a time. As the patient had not become insensible, the inhalation was resumed, and the tooth withdrawn. The patient became livid, and in a few minutes died. Her health had been excellent previously, and there was no reason known why she would not be a good subject for the gas. A case has also been reported in this country.—*Boston Med. and Surg. Journal*.

A SHREWD CALCULATION ON THE PROFITS OF DRUGGISTS.

ONE of the leading newspapers of the State, in discussing the question of percentages paid by druggists, says of a case in point: "If the actual cost of drugs used in the prescription were known, it would probably appear that fifty cents would have covered everything, and that all the rest was clear profit—or sheer plunder." Now, we suppose the cost of setting up an advertisement of three lines in that newspaper would amount to about three cents, and yet one would have to pay a dollar for it. Would the editor regard the ninety-seven cents as sheer plunder? Newspaper men had better not talk about profits of apothecaries.—*Pacific Med. and Surg. Journal*.

SPECIAL COMMUNICATIONS.

[We publish the following correspondence, which is of special interest to the profession.—Eds.]

SALE OF DIPLOMAS.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
WASHINGTON, D. C., March 26, 1880.

DEAR SIR: I have the honor to invite your attention to the following important letter from the United States Minister, at Berlin, of the 2d ultimo, and to the communication from the Honorable the Secretary of State, transmitting the same to the Honorable the Secretary of the Interior, by whom the paper was referred to me.

The issue of fraudulent diplomas by so-called institutions of learning in our country has been brought in many ways, and often, to the attention of this Office; the institution named in Mr. White's letter is not the only one of this kind known here.

The accompanying data bring out the character of these disgraceful transactions quite unmistakably. After reading them, I trust that you will co-operate in the detection of the offenders and the prevention of a practice so injurious to the credit of learning in the United States, and so opposed to the laws and practices of other nations.

Very respectfully, your obedient servant,

JOHN EATON, Commissioner.

Editors BUFFALO MEDICAL AND SURGICAL JOURNAL.

Mr. Evarts to Mr. Schurz.

DEPARTMENT OF STATE,
WASHINGTON, March 12, 1880.

SIR: I have the honor to transmit herewith for your information a copy of a dispatch (No. 87) of the 2d ultimo, from Mr. White, the Minister of the United States at Berlin, in relation to spurious diplomas issued by a so-called American University at Philadelphia. I beg to express the hope that it will be found

practicable to devise measures, through the Bureau of Education or otherwise, for the effectual suppression of the practice of issuing spurious diplomas at Philadelphia, which is proving so injurious to the reputation of this country with respect to higher education.

I have the honor to be, sir, your obedient servant,

WM. M. EVARTS.

The Honorable CARL SCHURZ, Secretary of the Interior.

Mr. White to Mr. Evarts.

LEGATION OF THE UNITED STATES,

BERLIN, February 2, 1880.

SIR: I regret to state that there seems to be a revival here of the sale of diplomas purporting to be issued by an institution of learning in the United States.

Some weeks since a Mr. Pappenheim brought me a diploma, engrossed on parchment in very handsome style, and issued nominally by "The American University at Philadelphia," conferring the degree of doctor of medicine upon one Christopher Schuetz, living, as I understand it, at Leipzig. It would appear that the diploma was offered to Schuetz upon condition of his paying a sum of money for it. It bears the signatures of a number of persons claiming to be professors in the aforesaid university, at the head of them being the signature of "John Buchanan, M. D." Schuetz desired the Legation to give him a declaration of its genuineness and value, which I refused to do. One peculiar feature of the diploma was that, although evidently entirely new and recently issued, it was dated 1872.

About ten days since another and more serious case was brought to my notice. The judicial authorities at Prenzlau forwarded a copy (which I inclose) of a diploma issued by the same alleged institution to Paul Christoph Erdman Volland, and signed by a faculty at the head of which appears the same name of "John Buchanan, M. D." The authorities at Prenzlau asked the Legation regarding the genuineness of the diploma and the

standing of the institution, it being with them a question whether Volland could be allowed to practice his profession under such a diploma.

After looking through the correspondence on record in this Legation (a memorandum of which is inclosed), and seeking in vain for the name of the institution in the list of colleges and universities published by the Bureau of Education in the Department of the Interior, at Washington, my answer was unfavorable to Volland's claim.

From the correspondence above referred to, I find that attempts have been made by the Legislature of Pennsylvania for the suppression of this nuisance; but that, after all, it is a question whether these attempts have been successful, and whether the institution has not still a legal existence. This being the case, I would respectfully suggest that the matter be brought to the notice of the Commissioner of Education in the Department of the Interior, at Washington, and that he forward me any documents or information in his possession regarding the subject.

You will observe among the papers accompanying the diploma of Volland, something much more serious than the diploma itself, and that is the authentication of it by Philip A. Gregar or Gregar, notary public of Philadelphia; and I bring this especially to the notice of the Department, hoping that something may be done to prevent officials in Pennsylvania lending themselves to what is undoubtedly a fraud, whether under the forms of law or not.

That such cases as these have brought disgrace upon the American system of advanced education and upon the American name in general is certain. This has been recently revealed to me incidentally in a curious way: in a very successful play now running at the Royal Theater, in this city, a play written, strangely enough, by a judge of one of the highest tribunals in the Empire, one of the characters, in casting a reflection upon another who is dignified with the title of doctor, declares a belief that the latter had simply bought his degree in America; and in a recent novel, by a popular author here, the scoundrel of the book, having escaped justice in Germany, goes to America,

and is, at last advices, very comfortably settled and practicing medicine with a sham diploma which he has bought for money.

All this, of course, is of no special significance in this case, save as it shows that the fair fame of our country has been and can be injured in the minds of a large number of people, even by such contemptible transactions as those herein referred to.

I have the honor to be, sir, your obedient servant,

AND. D. WHITE.

The Hon. WILLIAM M. EVARTS, Secretary of State, &c.

*The Diploma of Volland.**

Omnibus ad quos literæ præsentis pervenerint, præses, curatores professoresque Universitatis Americanæ Philadelphicæ, Reipublicæ Pennsylvaniae legibus constitutæ, salutem.

Quum in omnibus academiis rite legitimeque constitutis, aut hic aut ubique gentium, usus laudabilis et antiquus fuerit, ut viri, qui vel literis vel artibus ingenuis, vel quibuslibet studiis liberalibus, non minus diligenter quam feliciter operam dederunt, interea recte atque honeste se gerentes, aliquo eximio honore adornarentur, et ad meritam dignitatem attollerentur, et quum nos, secundum leges reipublicæ nostræ, amplissimam potestatem insigniendi decorandique titulis academicis, et promovendi ad gradus in sacra theologia, legibus, artibus liberalibus ac medicina viros bene merentes teneamus, nos igitur, hac auctoritate præditi usûsque antiqui haud immemores, decrevimus virum egregium, studiis optimis deditum, *Paul Christoph Erdmann Volland*, de cujus eruditione in *chirurgia dentaria arte* et probis moribus satis compertum exploratumque habemus, dignum atque idoneum qui honoretur, ut *vir doctus* altissimo dignitatis gradu; quare uno animo et creavimus et fecimus eum *chirurgiæ dentariæ doctorem*, eique omnia jura et privilegia quæ ad illum gradum attinent dedimus et concessimus.

*The diploma as given here is an exact copy of the original; the words written in the blank form are indicated by the use of italics.

In quorem fidem, has literas signo magno universitatis literariæ communiri jussimus, hoc *decimoquarto* die menis *Octoberis* annoque Domini nostri millesimo octingentesimo *septuagesimo nono*.

SEAL : { Eclectic Medical College
and American University,
Philadelphia, Pa. }

JOHN BUCHANAN, M. D.
JOHN J. FULMER, M. D.
ROBT. DEBEUST, M. D.
RICHARD FORBES, M. D.
CHARLES G. POLK, M. D.
C. H. KEHNROTH, M. D.
JAMES COCHRAN, M. D.
J. K. BOWERS, M. D.

A. P. BISSELL, LL. D.
JAMES ROBINSON.

HYDRATE OF CHLORAL.

Dr. H. H. KANE, of New York City, specially requests members of the profession with any experience whatever in the use of the hydrate of chloral to answer the following questions, and give any information they may possess with reference to the literature of the subject :

1. What is your usual commencing dose ?
2. What is the largest amount you have administered at one dose, and the largest amount in twenty-four hours ?
3. In what diseases have you used it (by the mouth, rectum, or hypodermically), and with what results ?
4. Have you known it to affect the sight ?
5. Have you ever seen cutaneous eruptions produced by it ?
6. Have you known it to affect the sexual organs ? If so, how ?
7. Do you know of any instances where death resulted from or was attributed to its use ? If so, please give full particulars as to disease for which given ; condition of pulse, pupils, respiration and *temperature* ; manner of death ; condition of heart, lungs and kidneys ; general condition, age, temperament, employment, etc., etc., etc. If an autopsy was held, please state the condition there found.
8. Have you seen any peculiar manifestations from chloral—as tetanus, convulsions, or delirium ?

9. Do you know of any cases of the chloral-habit? If so, please state the amount used, the disease for which the drug was originally administered, the person's temperament, and the present condition of the patient, with reference to the state of the body and mind in general, and of the various organs and systems in particular.

Physicians are earnestly requested to answer the above questions *fully*, especially 7 and 9, in order that the resulting statistics may be as valuable as possible.

All communications will be considered strictly confidential, the writer's name not being used when a request to that effect is made. Address all letters to Dr. H. H. Kane, 191 West Tenth street, New York City.

EDITORIAL.

CLINICAL REPORTS.

THE most important feature introduced by the present management into the JOURNAL is that of Clinical Reports. Two objects are designed to be subserved in this department: 1st, to encourage in the profession a habit, now sadly neglected, of keeping a record of cases, occurring in daily practice; 2d, to publish and preserve from oblivion, the observations, experiences and practice of physicians in rare and isolated cases, thus forming a mass of carefully collated facts and statistics.

In this department especially, we fulfill the earnest purpose set forth in our prospectus, to make the JOURNAL the reflex of medical thought as well as the exponent of the professional skill and attainments of our readers. With a view to secure so desirable an end it is positively essential that the profession, both here and elsewhere, should lend their aid in sending communications of their original researches with their practical observations and careful study of cases, ordinary as well as anomalous.

Medical Journals, not devoted to a specialty, but intended for the general practitioner, are valuable, not by reason of long ori-

ginal papers, which may be very hastily and superficially perused, but from practical hints and facts deduced from cases, which have been closely studied and carefully digested, as well as from judicious selections, covering a wide range of medical literature.

Reports, that are instructive and interesting, need not, of necessity, contain anything startling or wonderful. Often the most simple cases, if skillfully treated, convey a hint or an idea to the careful and interested student, of greater practical utility than the rarest instances of disease or the most heroic operations in surgery.

Reports also of comparatively rare diseases and operations, are at least valuable to the statistician, while cases, illustrating some new plan of treatment, or some new method of surgical procedure, are of interest to the thoughtful mind searching for light to clear up obscure cases often met with in professional life.

In this connection we have only one admonition to offer, that our contributors strive to guard against prolixity. We join in the sentiment adopted by secular Press: "Be brief; be brief; ever more be brief." Conciseness is not incompatible with clearness of description. It is not necessary for a thorough comprehension of a case to consume space in a detailed account of the hourly changes of temperature and variations of pulse. In such minuteness of detail, the significance of cases in a surgical, pathological and therapeutical sense may be obscured and their real value destroyed.

Recurring to the objects intended to be subserved in clinical reports, we are conscious that we have in view the real interests of the contributor as well as the greater interests of medical and surgical science.

BUFFALO MEDICAL ASSOCIATION.

THE April meeting of this Association was principally devoted to the election of officers and other business of no special interest professionally.

Judge Beckwith, of this city, however, kindly presented a paper, containing many practical hints concerning the testimony of medical experts—some extracts from which are given in this number of the JOURNAL. Next month more extended selections will be made from that portion, which treats of the right of physicians to demand payment for professional opinions rendered in court.

After the reading of this paper, the Association proceeded to ballot for officers for the ensuing year, the result of which was the election of the following: President, Lucien Howe, M. D.; Vice-President, Albert H. Briggs, M. D.; Secretary, Dougal Macniel, M. D.; Librarian, J. B. Samo, M. D.

MANAGEMENT OF INSANE ASYLUMS.

THE officers of the New York State Lunatic Asylum have been subjected to considerable criticism of late, by reason of accusations, which, to say the least, have been brought forward in a hasty and ill-advised manner. The alleged mismanagement was first made public through a sensational article in a New York daily, thus arousing the anxiety of all the friends of the insane.

Inasmuch as the statute provides a certain remedy for any such evils, when duly proven to exist, it seems hardly right to cast suspicion upon a number of intelligent physicians without first establishing the truth of every assertion made.

The attention of the Legislature was subsequently called to the management of the Asylum, but in view of the facts presented, the Committee on Public Health, in their report to the Senate, virtually acquitted the officers of the institution of all the charges made. The New York Neurological Society at once answered this report and, in consequence, agitated still more the subject of the government of the Asylum in question.

As one of the results of this discussion a bill has been proposed, which provides that the State Board of Charities may

exercise such authority over the various asylums, as now belongs to them individually. While there may be advantages in a law of this kind, there are also obvious objections to outside interference with matters of local interest, and any such change should be made only after careful consideration, and with the approval of the great majority of medical men.

FELLOWS' HYPO-PHOSPHITES.

THIS preparation combines phosphorus and strychnia in a very palatable and reliable form, especially adapted to the treatment of nervous affections, as well as a valuable auxiliary in bronchial and pulmonary diseases. It possesses also the property of forming an emulsion with cod liver oil, making a convenient combination in diseases in which these important therapeutic agents are indicated.

The sentiment of the profession in this vicinity is decidedly favorable to this preparation, and we do not hesitate to recommend it.

REVIEWS.

Hypodermic Injection of Morphia; its History, Advantages and Dangers.

By H. H. KANE, M. D. New York: Chas. L. Birmingham & Co., publishers.

The thanks of the profession are due to Dr. Kane for this admirable book, which deserves a place in the library of every physician. The book records the experience of 360 physicians in answer to certain questions which were generally published in the medical journals. The opinions and cases thus collected furnish abundant food for thought, and the conclusions drawn therefrom, by the author of the book, are suggestive and highly valuable. In the chapter on deaths from the subcutaneous injection of morphia, 36 cases are reported. One correspondent (name not given) reports a death from the injection of 1-5 of a

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grain of morphia combined with 1-75 of a grain of atropia. In this number of the JOURNAL we publish a series of questions from Dr. Kane on hydrate of chloral. The admirable manner in which he has worked up the information obtained by his previously published questions, entitles him to the confidence of the profession.

D.

Skin Diseases ; including their Definition, Symptoms, Diagnosis, Prognosis, Morbid Anatomy and Treatment, etc. A Manual for Students and Practitioners. By MALCOLM MORRIS, Joint Lecturer on Dermatology at St Mary's Hospital Medical School, etc., with illustrations. Philadelphia: Henry C Lea. 1880. Buffalo: Theo. H. Butler.

This manual contains 316 pages, and is written in a plain and simple style, usually adopted by lecturers in presenting their subjects to medical classes. It has also the merit of conciseness, and presents much that is valuable for the student and general practitioner in this difficult and obscure class of diseases. Not unlike other works of this kind, the brevity with which many subjects of great importance are treated, deprives them of the clearness and accuracy of description, which tends to a superficial and imperfect study of medical subjects. The author however, intends the work to supplement, not to supplant, existing treatises on skin diseases, and with this end in view, he has rendered good service to the profession.

L.

Clinical Lectures on the Diseases of Women, delivered in St. Bartholomew's Hospital By J. MATHEWS DUNCAN, M. D., LL.D., F. R. S. E., etc. Philadelphia: Henry C. Lea. 1880.

This small volume of 175 pages comprises Dr. Duncan's clinical lectures, delivered in Saint Bartholomew, originally published in the English Medical Journals, and now reproduced in a separate form. The wide reputation of the author on all subjects connected with gynecology is an ample guaranty that valuable and well-digested matter is furnished to the profession in whatever issues from his pen. A critical examination of this work unfolds so much that is indispensable to those interested

in this class of subjects, presented also with singular clearness and beauty, that we regard it as a valuable contribution to gynecological literature. The scope of the work does not enable the author to treat of many subjects, but his selection is just what the general practitioner requires for his daily work.

L.

A Manual of Auscultation and Percussion, embracing Physical Diagnosis of Diseases of the Lungs and Heart, and Thoracic Aneurism By AUSTIN FLINT, M. D. Second edition, revised Philadelphia: Henry C. Lea. 1880. Buffalo: Theo. H. Butler.

This work contains the substance of the lessons given in connection with practical instruction in auscultation and percussion to private classes, composed of medical students and practitioners. The author avoids all needless refinements, endeavors to consider the distinctive characters of the different physical signs by analysis, and lays stress upon the fact that knowledge of the significance of signs, rests solely on the constancy of their connection with the physical conditions which they represent. It is only necessary to state that this manual bears upon every page, the erudition, experience and skill of its accomplished author, and will be greeted by the profession as another of those valuable contributions to medical literature, which have placed Prof. Flint in the foremost position among medical writers.

L.

A Manual of Pathological Histology. By V. CORNIL, Assistant Professor in the Faculty of Medicine, of Paris, and L. RANVIER, Professor in the College of France. Translated with notes and additions, by E. O. SHAKESPEARE, A. M., M. D., Microscopist to the Philadelphia Hospital, and J. H. C. SIMES, M. D., Demonstrator of Pathological Histology, &c., in the University of Pennsylvania. With 360 illustrations. Philadelphia: Henry C. Lea. Buffalo: Theodore Butler.

The original work of MM. Cornil and Ranvier has had a high reputation in France. The American translators have done their work so well that the American version is in every way superior, and we believe that it will be generally recognized as the best

text book published in this country. The French work having been issued some years ago, is in some respects behind the present state of our knowledge; but in this edition we find that wherever the progress of the science has called for it, additions and changes have been made, with ability and excellent judgment, and the book is now a faithful exponent of the subject in its present state. The most extensive changes are in the sections on *sarcoma*, *carcinoma*, *tuberculosis*, and the classification of tumors.

The illustrations are numerous and well executed, and the mechanical part of the work is all that could be desired. D.

On the Internal use of Water for the Sick and in Thirst. A clinical lecture at the Pennsylvania Hospital, Oct 25, 1879. BY J. FORSYTH MEIGS, M. D. Philadelphia: Lindsay & Blakiston. 1880.

The author quotes on the title page a trite old English proverb: "Drinking water neither makes a man sick, nor in debt, nor his wife a widow," and with so suggestive a text he presents a monograph replete with practical thoughts upon the use of water, as a hygienic and therapeutic agent. Its careful perusal by the profession will call to mind many plain indications for the use of water, rather than drugs, in the treatment of disease. The principles therein inculcated are well worth consideration by every medical man. L.

The Student's Guide to Diseases of the Eye. BY EDWARD NETTLESHIP, F. R. C. S. Philadelphia: Henry C. Lea.

Although several similar manuals are already before the profession, this one deserved more than passing notice. The writer has succeeded in condensing into a small space most of the leading facts of ophthalmology and presenting them in a clear, forcible manner.

The means of diagnosis are set forth in three short chapters, which, in general, give such directions for the examination of

the external and internal portions of the eye, as to enable the student to see clearly the different features of a case, and to appreciate their significance. A good foundation having been thus laid, there follows the "Clinical Division," which naturally occupies most of the book.

In this, the diseases of the various structures are taken up in order, and treated in a simple and concise manner. No undue effort at originality is made, but well-established facts in diagnosis and treatment are so presented as to be easily remembered by the student, or referred to by the practitioner. The chapter which treats of "Diseases of the Eye in Relation to General Diseases," is a good epitome of this phase of the subject, and well worth reading.

The operations are, for the most part, grouped together in one chapter, and although this is in imitation of some of the most elaborate German works, it can hardly be considered the best arrangement. Moreover a few lithographic plates, representing diseases of the fundus, would add much to the value of such a hand-book without materially increasing its price, and a small collection of test-types, and one or two diagrams for the recognition of astigmatism, would also prove very convenient.

As a whole, however, we have here the most recent facts in ophthalmology set forth more clearly and in a smaller space than in any similar compendium now available to the English or American medical students.

H.

American Health Primer—Our Homes. By HENRY HARTSHORNE, A. M., M. D. Philadelphia: Presley Blackiston, 1012 Walnut St. 1880.

This little work is the ninth of the series, and contains practical and valuable hints and information in regard to the situation, construction, light, warmth, ventilation, water supply, drainage, disinfection of our homes. It is written in a popular style, suited to the general reader, and will be of essential service to the medical profession in disseminating facts on sanitary matters.

L.

Muscle-Beating; or Active and Passive Home Gymnastics, for Healthy and Unhealthy People. By C. KLEMM, Manager of the Gymnastic Institution in Riga With ten Illustrations. Price, 30 cents New York: M. L. Holbrook & Co

This work is a novelty and very suggestive, and will prove a valuable addition to the numerous modes of exercise, especially for chronic invalids and sedentary persons. L

Photographic Illustrations of Skin Diseases. By GEORGE HENRY FOX, A. M., M. D. Complete in twelve parts; forty-eight colored plates, taken from life. Price \$2.00. New York: E. B. Treat, 805 Broadway.

We have taken occasion before to refer in commendatory terms to the great service which Prof. Fox has performed in presenting to the profession these admirable illustrations of a class of diseases, concerning which there is a wide-spread ignorance existing because of a want of familiarity with their varied and multiform phases.

Parts 7, 8, 9, 10 recently received, more than justify all that has been previously written of these valuable works.

Part 7 treats of lupus vulgaris, lupus erythematosus, epithelioma superficiale and rodens, and epithelioma, and contains plates beautifully illustrating these diseases, which, for study, are quite equal to actual cases.

Part 8 treats of trichophytosis capitis and corporis, lichen planus and lichen ruber, with plates, taken from life, giving a wonderfully accurate idea of these diseases.

Part 9 treats of kerion, lepra maculosa, molluscum and erythema multiform.

In this number the plate illustrating erythema multiform is so life-like, that we doubt if any could ever mistake the disease, after studying this illustration with the accompanying text.

Part 10 treats of phtheiriasis capitis and corporis, scabies and porrigo pediculosis.

The work fulfills all the assurances given by the publisher for accuracy and completeness, and constitutes the best guide and help yet published in the study of dermatology. L

THE BUFFALO MEDICAL AND SURGICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

TESTIMONY OF MEDICAL EXPERTS.*

BY HON. CHARLES BECKWITH,

Judge of the Superior Court of Buffalo, N. Y.

THERE is another question which has excited some interest recently, that is, the compensation to which medical and other scientific experts are entitled upon being required to testify in court. It is claimed by some that a physician or surgeon can not be required to testify to a matter that involves the employment of his professional knowledge or skill without recompense, or the promise of recompense, as for a professional service or opinion. Dr. Ordronaux, in his work on the Jurisprudence of Medicine, affirms this proposition. Curiously enough the question seems not to have been much before the courts, either in this country or in England. That would indicate that the right to such compensation had been generally conceded or allowed; or, on the other hand, that the right to it had not been thought of, nor asserted, nor such compensation allowed. I think the annals of the legal and medical professions, as well as experience, tend to show that the allowance of such a compensation had never

* Concluded from May Number.

in fact become a practice. If I am correct in the view I have taken as to the nature of expert testimony, and its quality and rank as evidence, and its use in legal investigations, no claim to extra compensation by the witness could be sustained on account of any superiority in species of the testimony he gives over other testimony in the case, or on account of its greater importance to the courts in the administration of justice. We must look, then, for the reasons that substantiate such a claim, to the office of the expert, his situation in society, or his relations to the duty or act of giving his opinions in evidence in courts, as required by law. This question has not occupied the attention of the courts very much in England, owing probably to the existence of a statute passed in the reign of Queen Elizabeth, requiring the payment to a witness, when subpoenaed, of his reasonable charges, according to his "countenance and calling." In this State the law prescribes an invariable fee for all witnesses, high or low, rich or poor, which is fifty cents for each day's attendance; and if the witness reside more than three miles from the place of trial, four cents a mile travel-fees going and returning—thus placing, in this respect, all citizens of the State upon a level of equality. The people of this State have adopted a policy which is plainly visible in the statutes which they, in their majesty, have prescribed. They have empowered every court of record, in the language of the statute, "to issue process of subpoena, requiring the attendance of any witness residing, or being in any part of the State, to testify in any matter or cause pending in such court." Again the statute provides, "Every court of record shall have power to punish by fine and imprisonment or either, all persons summoned as witnesses, for refusing or neglecting to obey such summons, or to attend, or be sworn or answer as such witnesses." There are numerous other provisions for compelling the attendance of witnesses, and for punishing those who intercept or restrain them in going to court, and also making it unlawful even to arrest them, when under subpoena, on civil process.

Thus it would appear that under the policy of this State all persons indiscriminately are bound, when summoned by lawful mandate, to appear and testify in the courts. In the case of the *People vs. Montgomery* (13 Abb. Rep. (N. S.) 207) tried in the County of Monroe, in 1870, where a contract was entered into by one party to the action with a medical expert for a compensation of \$500, the question arose as to whether the validity of the verdict was affected. It was held that it was not. The Court said: "The District Attorney, it is true, might have required the attendance of Dr. Hammond on subpoena; but that would not have sufficed to qualify him to testify as an expert, with clearness and certainty, upon the question involved." * * "He could not have been required, under process of subpoena, to examine the case and to have used his skill and knowledge to enable him to give an opinion upon any points of the case."

Under the authority of this decision it seems that if the law should be held to be, that a medical expert is bound to obey a subpoena, still, he has it in his individual power, if a party wants his opinion, to coerce compensation as for professional services, by refusing to examine the case before going to court, and by refusing to listen to and consider the testimony given on the trial. And it may be conceded that the court can not compel the witness to spend any time, or perform any examination or service in order to prepare himself to give testimony upon the facts, or to give an opinion. It is, however, contended in some quarters that a medical expert can not be compelled upon service of a subpoena, and tender of the ordinary witness' fee, to give his opinion or testimony, even in those cases, and upon those questions where no special preparation is necessary.

The question was up recently in the State of Indiana, in the case of *Buchman vs. The State*. Dr. Buchman appeared in court on the subpoena of the prisoner, and put on the stand as a witness. He testified that he was a physician and had practiced several years. A question was then propounded to him which he refused to answer, saying that the answer would depend upon

his professional knowledge of the subject, and he would not give it without being paid. The trial court held that he was bound to answer the question without extra compensation, and the witness persisting in his refusal to answer, the court committed him for contempt. The Doctor took an appeal from the order committing him for contempt and carried the question to the highest court of review in that State. The Supreme Court held that his committment was error. The argument of the court was that physicians and surgeons, whose opinions are valuable to them as a source of income and livelihood can not be compelled to give their opinions in a court of justice upon professional questions without compensation as for professional services; that in testifying as an expert by giving his opinion, the physician is performing in reality a professional Service. The decision goes upon the ground that the professional knowledge and skill of a medical expert is his private property, and cannot be taken from him without compensation, and that giving his opinions on trials at law is the performance of a professional service.

It is the principle embodied in all the state constitutions that you shall not take a man's private property without compensation.

But how is it that a physician's property is taken from him when he gives his opinion as an expert in a court of justice?

Suppose his knowledge and skill, in a figurative sense, are his property and his capital stock in business, are they taken from him when he testifies? It seems to me one might as well say that a man parts with the grace and sentiment of charity by giving alms. What does he lose that is his own when he testifies? Does he not retain in possession the same knowledge and skill? If he does, then of what property has he been deprived? "By giving ye shall receive." It is the compensation of nature that every effort one puts forth, especially under the stimulus of important occasions, makes more clear and perfect his hold upon his mental treasures. And what ownership has the expert in those matters to which he testifies—those relations existing

between special cases and general states; those sequences of cause and effect in physical facts; those logical truths of the agreement or disagreement of special phenomena with the supposed and accredited order of nature?

The Supreme Court of Indiana, certainly a court entitled to great respect, uses the further argument that the more eminent a physician or surgeon, the more frequently will he be called upon to go into all parts of the State, to render his services, without other compensation than the ordinary witness fees. In exceptional cases a hardship of this kind might occur, but I fail to see its force as an argument that professional compensation can be claimed. Men in all ranks feel the hardship of those compulsory sacrifices they make in the public interests. Under the operation of our statutes, Vanderbilt could to-day be summoned away from his imperial railway enterprises, to attend an ordinary trial in Buffalo, and along with him the poor artisan or laborer whose family depend for sustenance on his daily earnings.

The same question of the right of the surgeon to refuse to give his professional opinion until paid therefor, arose also not long since, in the case *ex parte Dement*, reported in the 53d volume of the Alabama reports. It was a trial of an indictment for murder, and Dr. Dement having been put on the stand as a witness, refused to answer a question that called for his opinion respecting the wounds found on the body of the murdered man, on the ground that he had not been compensated. The judge imposed a fine for contempt. Afterwards the doctor brought a proceeding in court to vacate the order fixing the fine, claiming that it had been illegally imposed, and the matter was carried to the court of last resort for review. The case was instituted, it is said, in the interests of the medical fraternity of that State. That court, after careful consideration, came to a conclusion directly opposite to that of the Supreme Court of Indiana, and held that the fine was lawfully imposed.

Maning, J., delivering the opinion of the court, says: "The same principle which justifies the bringing of the mechanic from

his workshop, the merchant from his store-house, the broker from 'change, or the lawyer from his engagements, to testify in regard to some matter which he has learned in the exercise of his art or profession, authorizes the summoning of a physician or surgeon, or skilled apothecary, to testify of a like matter, when relevant to a cause pending for determination in a judicial tribunal. And if in a prosecution for murder it was proved that his supposed victim had, a short time before his death, drank something which he had received from the accused, and a chemist had analyzed the liquid, and testified what substances it contained, and a physician was summoned to prove what effect they would have when taken into the stomach of a living man, and what would be the symptoms of such effect, no court would be excusable in exonerating the physician from giving such evidence, solely on the ground that it would be a professional opinion for which he had not been paid, or received a promise of payment. In so testifying he would not be practicing the healing art; he would, like the merchant, or the lawyer, or the mechanic, before referred to, be deposing only to those things which he had learned in the course of his occupation or profession, or of the preparation for it, and the disclosure of which to the court would conduce to a correct understanding of the cause before it. His testimony would concern the administration of justice, and of him as of the other witnesses, it could be justly claimed by the public as a tax paid by him to that system of laws which protects his rights as well as others."

As is apparent, the decision of the Alabama court meets my approval rather than that of the Supreme court of Indiana. While I am of the opinion that the medical expert in court has not now, in law, a right to professional compensation, still there may exist an equitable claim here that deserves legislative remedy, perhaps a return to the wisdom of Elizabeth, grading the compensation of witnesses according to their "countenance and calling."

Certainly the practice of allowing parties to contract with experts upon the consideration of round sums of money to pre-

pare themselves and come into court to testify, to swear away the rights of their fellow-men, is a strange incongruity in that system which provides so many barriers against the influence upon the scales of justice of all forms of interest, prejudice, bias or passion. Since the trial of Dr. Schoeppe, in Pennsylvania, Mrs. Wharton in Maryland, and other equally notorious cases, one may well feel apprehensive about adding the thirst for gold to the ordinary and natural zeal of the professional witness. The inquiry suggests itself whether in important cases where the testimony of experts is necessary, the court should not have and exercise the power of appointing a commission of skilled persons to examine the facts and testify to the results and their opinion as *quasi* officers of the court, reserving always to the party affected adversely the right to require an exposure of the facts and the grounds of the opinions.

CLINICAL REPORTS.

INJURIES TO THE CRANIAL BONES.—TREPHINING.

REPORTS OF TWO CASES TREATED BY ELEVATING THE DEPRESSED BONE.

REPORTED BY S. G. DORR, M. D., POLICE SURGEON.

WHEN to trephine, and when not to trephine, in fractures of the skull has always been a poorly defined subject. From time to time surgeons have advanced a step in the direction of more frequent operations, and to-day the only debatable ground is where there is a fracture, with depression and with an external wound, but without insensibility, coma or delirium shall the surgeon interfere with some operative procedure or not?

It seems strange that after all the advancement in medical science, this question should yet remain without a positive and never-varying affirmative answer. I think this question should be, at this time, answered affirmatively by every physician, and the debatable ground to exist only where there is fracture with-

out external wound and without depression, unless the patient is quite young, and without insensibility, coma or delirium.

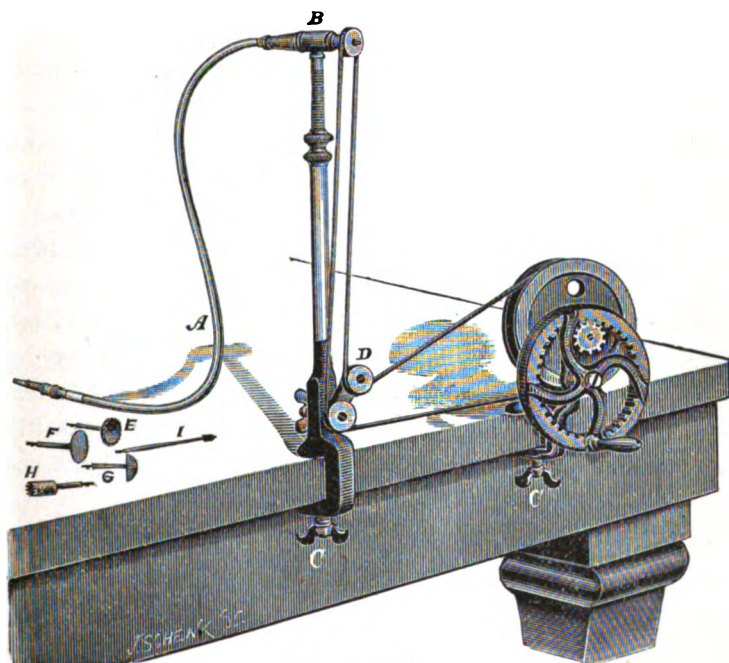
In looking over such records of cases, which have come to my knowledge, and by dividing them into three classes, I find some strange and startling results. The first class includes fractures of both tables, without any known depression; of this class the death rate was 64.6 per cent.; the second class, fractures of both tables, with known depression; of this class the death-rate was 35.8 per cent.; the third class of fractures, with depression of bone, with coma, delirium or insensibility, with formal trephining, and of this class 56, 6 per cent. died. It is not necessary to draw any extended deductions from these surprising results. All that I wish to occupy your valuable space in the JOURNAL is to deal, if possible, with some practical points which will benefit your readers and their patients. Of the third class I will not speak. They are not included in our proposition as first stated, that is, they do not occupy debatable ground. Of the second class there are fewer deaths than of either of the other two, and this is the class which justly occupies the present debatable ground. Some surgeons say, do not operate; others, it is best to trephine.

But all do agree upon one point, and that is if the broken parts are loose and easily to be gotten out, it is better to remove them. So that whether to trephine or not, in cases of the second, all depends upon the ability and ease of removal of the fractured parts. Hence, if by any means these fractured parts can always be removed with ease and without danger or difficulty, then always are those of the second class to be trephined and the question advanced, leaving those only of the first class to occupy the debatable ground. I will report two cases of the second class, the mode of operation and the results.

Late in the afternoon of April 17th, 1880, Geo. C., aged 21, presented himself at my office, with a depressed fracture, two and one-quarter inches long by three-eighths wide in the frontal bone extending from above the right eye directly upwards. This fracture had been produced by the bursting of a one-half

inch thick emery wheel, worn somewhat thinner on the edge while running at a high speed.

The flesh and hair were driven in and held fast by the fractured bones, which were not broken loose, from the internal table, but had split lower, forming a long tongue, which had sufficient strength to hold very fast every thing that had been



SURGICAL ENGINE.

A represents a flexible shaft which revolves in a flexible sheath. At the point *B* the shaft is held in a swivel-joint, which facilitates its lateral movements. *C* are clamps for the fastening of the engine to the operating table. *D* are pulleys which can be reversed, so that the driving power can be placed on the opposite side. *E* is a saucer-shaped saw for cutting curves. *F* is a plain circular saw for cutting straight lines. *G* is the burr spoked of in the cases reported. *H* is an ordinary trephine of small size. *I* is a simple drill. These are attached to the flexible shaft, and are managed with ease by the hand while running at a high speed.

driven into its grasp. Here was a depressed fracture with no symptoms of compression, and the fractured parts well attached to the internal table; with the ordinary trephine very difficult to remove, but with the surgical engine there would be no difficulty whatever, and I determined to remove them and accordingly called in Drs. Van Peyma and Pettit, to assist in the operation.

Chloroform was administered to but a slight extent, and with an assistant to turn the crank of the instrument (which is so constructed as to give motion to burrs, drills, saws, &c., by means of a flexible shaft), I began burring off the overlapping edges of the outer table. As soon as the outer opening was enlarged a little over one-eighth of an inch, all the way round, and pieces slightly cut with the burr at their points of attachment with the inner table, they came out with ease. The membranes were found to be but slightly injured by a small spicula of bone. The external scalp wound was pushed together, and held by compresses and bandages. The pulse was 80 and showed but slight variation during recovery. Cold water dressings were applied to the head, comp. scammony powders and bromide of potassium were ordered. The following day only the patient kept his bed. In thirty-six hours after the operation he dressed himself, and from that time was about the house, and in ten days went to his work in the mill again, the wound having united without discharging hardly sufficient to stain the dressings. He says he suffered no more pain than he has frequently with headache. Now, thirty days after the operation, I can not see but that he has completely recovered.

Second Case: The evening of April 18, 1880, I was telephoned by Captain Yox, of the Eighth Precinct, to examine a saloon-keeper, who had been struck on the head with a mallet several hours previously.

The patient, a Frenchman, aged about 30, had a scalp wound on the right-parietal prominence; with my finger in the wound I could feel the edge of the fracture, and also about three-eighths of an inch deeper down, or depressed, a flat plate of bone, which was more or less loose. The patient showed no symptoms of compression of the brain. With the assistance of Dr. Van Peyma, our patient was trephined while under the influence of chloroform. The opening in the skull was one and a half by one and a quarter inches, and oval. The piece which was depressed and detached throughout its entire circumference by the blow from the mallet was, as is usual in these fractures,

much larger than the opening in the external plate. The simple and easy way to get out such a piece is to make the opening larger. A rapidly revolving burr, driven by the surgical engine, was brought to bear against the overlapping edges of the outer table, which cut round and removed every obstruction to the elevation of the depressed oval plate. It was then picked out, showing below some small clots of blood, but no injury to the membranes. The scalp was pushed together, and the same treatment observed as in the first case. The next day the patient showed very much mental sluggishness. The third day he complained of hearing double, as if two persons were speaking, one repeating after the other; also weakness of the left arm and leg. From this time he made rapid and complete recovery, the pulse being most of the time 70, falling during the second day to 60. It will be observed by this mode of operating that only the outer table is cut away, and is therefore safe and simple. It makes the removal of broken bones a very easy operation. It likewise removes all arguments against the removal of depressed bone without waiting for coma, delirium or insensibility.

SPONTANEOUS DISCHARGE OF A LARGE VESICAL CALCULUS FROM A MALE.

REPORTED BY CHARLES G. STOCKTON, M. D., BUFFALO, N. Y.

Two years since a man entered the Buffalo General Hospital for the purpose of having removed a number of calculi which were confined within his urethra, between its membranous portion and the meatus.

The case was placed in charge of Dr. C. C. F. Gay, at whose suggestion this report is made.

The meatus having been enlarged by a slight incision made near the frænum, permitted the escape of eight or ten uric acid calculi, nearly uniform in size, and about four millimeters in length by two or three in width. No dressing was thought

necessary. Much of the history of this case seems very unusual, and is therefore given below.

An American, aged forty-five; when in his twenty-first year, experienced symptoms of vesical calculus, and consulted Dr. W., of Whitehall, N. Y., who examined the patient and informed him that he had a stone in the bladder, and that he could be relieved only by the use of the knife. No operation was made; but after six months of inconvenience the symptoms occasioned by the stone gradually subsided, and finally all disappeared.

Four years later, in 1859, the patient entered the army, serving on the plains of Nebraska, and was most of the time in the saddle. He also contracted syphilis, but enjoyed immunity from his old trouble five years more, when it re-appeared; and he again suffered the ordinary subjective signs of stone in the bladder.

In the year 1865 he returned to this State, and underwent the operation for lithotripsy, in Troy, which resulted in his great relief. In the year 1872 a tumor appeared in the hypogastrium immediately over the pubes, in the median line. It opened externally and discharged, with other matter, a *calculus fully three-fourths of an inch in diameter*; then healing, without any signs of urinary extravasation, left a deep ugly cicatrix. From this time until their removal by Dr. Gay, the patient was troubled with the urethral calculi; since which he pronounces himself well.

The most remarkable, and to me, wonderful part of the above history, is the spontaneous discharge of a large calculus from the bladder of a man; which procedure is surely a novelty in the annals of natural repair. One would feel some incredulity regarding his statement but for these facts. The cicatrix was of very unusual depth. It was removed from the tract of lymphatics, and could not have resulted from a suppurating gland.

The patient was very simple and direct in his statements, and impressed one as a man telling the truth.

He extracted the calculus from the opening with his fingers, and it was for some time preserved. Other facts that confirm

the story were obtained by Dr. W. L. Dickinson, one of the hospital internes.

How can we explain such a phenomenal process? May not the stone have been encysted in the anterior wall of the bladder as the first step; then acting as a foreign body, excited inflammation and suppuration till it finally effected its escape, without extravasation of urine? If this stone were not encysted the case might be an argument in favor of the operation for lithotomy. In looking up the literature of supra-pubic openings into the bladder I have found some very interesting statements and statistics pertaining to this operation given by Dr. Dulles, of Philadelphia, in the *American Journal of Medical Sciences*, for April, 1878.

TRANSLATIONS.

NERVOUS DYSPEPSIA.

FROM THE DUTCH BY P. W. VAN PEYMA, M. D.

UNDER this name W. O. Leube (*Archives fuer Klinische Medicin*, Dec. 1878), describes a pathological condition, which, although it gives rise to subjective symptoms similar to those observed in a number of other pathological conditions of the stomach, must yet be considered as a separate and distinct disease. The dyspeptic symptoms accompanying this disease are a feeling of fullness in the epigastrium, eructations, nausea, irregular appetite, tendency to cephalic congestion, weariness, sleepiness and headache. But in one particular there exists an important difference. In other diseases of the stomach, such as carcinoma ventriculi, gastric catarrh and gastric ulcer, accompanied by symptoms of dyspepsia, the digestion is disturbed and the food due to deficient peristaltic motion, remains in the stomach longer than usual. Leube finds this not to be the case in nervous dyspepsia. By means of a stomach pump and injec-

tions he satisfied himself that the stomach was empty within the normal time, seven hours after a meal. The water injected was returned clear and wanting in food.

In the differential diagnosis of nervous dyspepsia this fact obtains prominence. By this means we can exclude carcinoma ventriculi and chronic gastric catarrh. In the second place it is important with a view to diagnosis to note the negative result of a thoroughly applied dietetic regimen; this in the case of gastric catarrh being seldom without its effect. Certain cases of gastric ulcer, which run their course with few marked symptoms, unaccompanied with pain or vomiting and where the digestion is complete within the normal time, are most likely to give rise to a mistaken diagnosis.

In doubtful cases, both the uselessness of the thoroughly employed dietetic course, and the good results obtained from the employment of electricity over the region of the stomach during digestion, serve to render the existence of nervous dyspepsia probable. According to Leube, this disease is not rare and is generally observed in the higher classes within the first ten years after puberty. In accounting for the symptoms of nervous dyspepsia, Leube calls attention to what takes place physiologically after a somewhat hearty meal. The then occurring symptoms—the feeling of fullness in the epigastrium, the tendency to cephalic congestion, the disinclination to mental exertion, the weariness of the limbs, the sleepiness, can hardly be considered as the direct influence of the digestion upon the nervous system.

According to Leube, it is not so much the absorption of the products of chemical change, although this probably serves as a moderate stimulant to the nervous system, but later the purely mechanical irritation to which the gastric nerves are subject upon the introduction of food, and through which the whole nervous system is secondarily affected. In nervous dyspepsia the above nervous symptoms are observed in an increased degree, and this, because of the abnormal reaction of the gastric nerves to a normal stimulant, viz: the digestion of food. The cause

of this abnormal reaction must be sought for in the gastric nerves themselves, although we may be unable, as in the case of the other so-called neurosis, to point out the anatomical changes. Some cases are incurable, and these hardly admit of relief. In the treatment of this obstinate disease, remedies tending to invigorate the general nervous system are particularly to be noted. The most important is the cold water cure. The use of iron and quinia internally, and electricity, both the induced and the constant current, the latter both externally and internally. The latter method of application, Leube has of late discarded, as affording no particularly beneficial results. The food must be easy of digestion. Sea bathing and sojourning in a mountainous region are useful to complete the cure.—*Weekblad von het Nederlandsch. Tydschrift voor Geereeskunde.*

THE BROMIDE OF ETHYL AS A LOCAL ANÆSTHETIC.

BY M. TERRILLON, THE SOCIETE DE CHIRURGIE.

FROM THE FRENCH BY F. PETERSON, M. D.

I HAVE used this agent a dozen times for obtaining anæsthesia in the employment of the thermo-cautery. In all the cases I have seen, produced at the end of one or two minutes a blanching of the part, indicating anæsthesia of the skin. The pain was absolutely nothing. When it is necessary to prolong the anæsthesia, it may become sufficiently profound for opening abscesses situated one centimeter below the skin. The blanching of the skin is not an indispensable part of the anæsthesia, but so far this method has not deluded my hopes. I have, however, failed in one or two cases because certain atomizers gave much too fine a jet, and then the result was not obtained. I have had made an apparatus of a larger caliber which anæsthetizes the surface of the hand in one minute and some seconds. It is necessary that the beak of the atomizer be at a moderate distance from the hand, some eight or ten centimeters.—*La France Medicale.*

COTO BARK IN DIARRHEA OF PHTHISIS.

THE coto bark imported from Bolivia, is employed in Germany and England, in the treatment of the diarrhea of phthisis. Burney Yeo recommends the following mixture, which is very efficacious without being disagreeable to the taste.

℞ Tinct. cotonis.
 Tinct. cardamonie āā gtt lx.
 Mix and add gradually
 Mucilag. acacia, 12 grammes.
 Syrupi simp. 8 "
 Aquae 180 "

Two or three teaspoonfuls of this mixture, taken several times, suffices to arrest the severest forms of diarrhea. The bark may be given in the extract, which has the same properties.—*La France Medicale*.

 SELECTIONS.

THE AUDIPHONE AND KINDRED INSTRUMENTS.

BY E. L. HOLMES, M. D., OF CHICAGO.

ANY improvements in the application of a well-known principle, which tends to mitigate human suffering, or ameliorate any infirmity, must be a subject of interest to every physician. Such improvement, if it be of advantage to but a small proportion of cases for which it seems theoretically applicable, claims careful consideration.

There have recently appeared in the daily journals of the East and West so many notices of public demonstrations, in which it is said the deaf are made to hear by means of the audiphone, that I have thought it might be of interest to members of this society to know definitely on what basis these reports rest.

It is generally known that some patients can hear a watch, held between the teeth, or in contact with some portions of the

head, better than when it is placed quite near the ear. It is not so well known that a few patients, who cannot hear loud conversation, can converse readily through the medium of a small piece of wood, twenty inches, more or less, in length, one end being held between the teeth of the patient, the other end between those of the person conversing with him. The vibrations of sound are conducted through the tissues of the head to the auditory nerve. The use of the audiphone is based on the principle involved in these experiments.

The instrument is a thin, but quite large plate of black vulcanized rubber, to which is added a handle. The whole may be said to resemble a square fan. By means of cords and a clamp near the handle, the upper edge of the thin portion may be brought downward, causing the whole plate to curve. The fan in this form is usually placed with the concave portion turned toward the person using it, the upper edge being gently pressed against the upper (eye) teeth.

The vibrations of the fan produced by sound, are conveyed through the teeth and bones to the ears. According to my own observation and that of those upon whose testimony I can rely, the number of the deaf who are thus practically benefited is exceedingly small. Occasionally a patient is aided in hearing to a remarkable degree. Published statements regarding the extraordinary results in the use of the audiphone should be received with great reserve. Some of these statements are gross exaggerations. Poor patients, especially, should be cautioned not to waste their means in purchasing the instrument before they have tried it, for it will certainly, in a majority of cases, disappoint them.

I have heard of patients whose hearing was improved by the use of a sheet of bristol board, a broad plate of wood, or of a Japanese fan, bent to a proper curve (tension,) and placed in contact with the teeth. It is doubtful whether the most approved form and material for this instrument has yet been discovered. Possibly a round fan with a delicate rim of steel, the whole so constructed, as to resemble in form, the natural mem-

brana tympani (concave) might be more beneficial and graceful than that now in use.

Possibly, also, a piece of hard rubber, or other substance, attached to the disc, (fan,) as the malleus is attached to the membrana tympani, might be a better medium for conveying the vibrations to the teeth. It may be that the efficacy of the audiophone (and dentaphone,) may be increased in some cases by closure of the external meatus, as in certain experiments with the tuning-fork.

Another instrument, the dentaphone, constructed on scientific principles, is composed of a vibrating disc enclosed in a case, resembling the mouth-piece of an ordinary telephone. Attached to the center of the disc is one-end of a cord, the other end of the cord is fastened to a small piece of wood. The vibration of the disc, communicated through the cord to the piece of wood held between the teeth, is conveyed to the auditory nerve.

It is stated on reliable medical authority that this contrivance compares most favorably with the audiophone.

It may not be out of place to make brief allusion to the means which have been devised to improve the sense of hearing. These are chiefly the ordinary trump $\acute{e}$ t and the artificial membrana tympani. The action of the trumpet is too well understood to require comment. I will only state that each patient must try for himself the various forms of the instrument, and select the one with which he hears best.

The artificial membrane is usually a simple disc of rubber or fish scale, to the center of which is attached a delicate style of metal or rubber. In place of this little instrument a small pellet of cotton, properly adjusted in the external meatus is often employed. These are used not only to improve hearing but also to protect ulcerations from the air, and assist in the curative process. It is remarkable to what an extent these simple means will, in exceptional cases, improve hearing.

I may state that all forms of auricles, vibrators, and invisible tubes, so often advertised in exaggerated terms as enabling the deaf to hear distinctly, are almost absolutely valueless.

The audiphone is an invention of Mr. R. S. Rhodes, of Chicago. The dentaphone is manufactured in Cincinnati.—*Chicago Medical Journal and Examiner.*

STRETCHING OF SCIATIC, DIGITAL, AND INFRAORBITAL NERVES.

FOR the following notes we are indebted to Mr. R. Purdie, M. B., C. M.

Case 1. *Stretching of the Sciatic Nerve.*—M. F—, a miner, was admitted in the month of August of last year. He had suffered for several months from sciatica. In consequence of want of rest and exhaustion, caused by the intense paroxysms of pain, the man had become emaciated and debilitated and quite unfit for his occupation.

Before nerve-stretching was used other methods were tried as well as tonic treatment; local means, such as acupuncture of the great sciatic along different parts of its course. The use of galvanism, and lastly the use of galvano-puncture of the sciatic nerve; but none of these remedies produced more than temporary relief.

On the 3d of September, the patient having been brought under the influence of chloroform, an incision one inch and three-quarters in length was made, from the margin of the gluteus maximus along the outer margin of the biceps; the fascia was opened, and the nerve was readily exposed and hooked over the finger. It was then forcibly stretched, while the foot was held somewhat fixed by an assistant. The stretching was continued until the nerve was loosened, and a sense of yielding obtained. The wound was then lightly dressed, and healed by the first intention.

Since leaving the hospital (now more than a year since) occasional slight twichings have been felt in damp weather, but nothing compared to the intense pain suffered before the operation.

Case 2. *Stretching of the Digital Nerves*.—The patient, D. H—, suffered from whitlow on the dorsal surface of terminal phalanx of the forefinger seven years ago; after the pus had been evacuated stiffness of the joint at the phalanx gradually set in, accompanied by a severe pain of a paroxysmal character, occurring most frequently at night, and lasting from about a quarter to one hour. This pain began at the tip of the finger and shot upwards as far as the proximal phalanx. All feasible remedies were tried with no satisfactory result. On the 30th June, the patient having been put under chloroform and an elastic band tied tightly round the finger, Mr. Spence, by longitudinal incisions, exposed the digital nerves. He then introduced a blunt hook under each nerve, and stretched these forcibly. The patient was able to walk home on the same day.

The wounds soon healed, and there has been complete freedom from pain since.

Case 3. *Stretching of the infra-orbital Nerve for Epileptiform Neuralgia*.—The patient, C. D—, was admitted into the infirmary on the 3rd of April last, suffering from severe neuralgic attacks on the left side of the nose, left cheek, and eyebrow, and shooting up over the forehead. His first attack was in December, 1876, continuing more or less for a month. After a period of four months he was again attacked. On that occasion some relief was obtained by the extraction of some of the teeth of the upper jaw. Ultimately the pain became almost incessant, being liable to be set up by the slightest touch or movement, as in swallowing, etc., or by draughts of cold air. The attacks were most severe about midnight, and were usually preceded by a cold shiver running down the spine.

On May 22nd, the patient being put under chloroform, Mr. Spence exposed the infra-orbital nerve by a transverse incision. He then introduced a blunt hook under the nerve, and fixing the upper lip with the left hand, stretched the nerve with considerable force.

On the fifth day after the operation a slight return of the pain took place, and, as the incision had not united, Mr. Spence again stretched the nerve.

The wounds healed kindly, and there has been no return of the pain since.—*London Lancet*.

TREATMENT OF LEUCOCYTHÆMIA.

BY ALFRED CARPENTER, M. D.

THE author pointed out that there was something wanting in the present plan of dealing with therapeutics, inasmuch as members of the medical profession are continually trying processes for the cure of diseases which have been shown to be useless, and that text-books continue to recommend medicines which have never done any good. He then gave the history in general terms of two cases of leucocythæmia which he had met with in private practice, and in which there were singular symptoms, one being associated with intense neuralgia, the other with recurring priapism. The neuralgia case was treated by means of iron, stimulants, and narcotics. In the opinion of the author, the remedies only increased the intensity of the pain. He always found that the internal as well as the cutaneous administration of narcotics left the patient more sensitive after the effect of the dose had disappeared, that they were useless in arresting the course of the disease. He entered a protest against the cutaneous administration of narcotics as only another form of intoxication, and he objected to medical men making themselves parties to so reprehensible a practice. He had found iron and stimulants unable to arrest the course of leucocythæmia, and he urged that their use was only a waste of time. The second case was treated by means of bromide of potassium, iron, quinine, and turpentine. The priapism had recurred at regular intervals for some time; it had not been controlled by any of the ordinary remedies used, but it seemed to be mastered by the use of galvanism. He deduced five points as worthy of record, and which

the author considered to be in a great measure proved by the results of this case (fortified as they were by his experience in the treatment of others). Point 1 was that bromide of potassium did not arrest the course of the disease, and had no effect upon the enlargement of the spleen in this disease. Point 2, that quinine did not have any beneficial effect in leucocythæmia, and it seemed by this result to separate the disease entirely from those affections of the spleen which are associated with malaria; that even in the large doses which were given for nineteen days, viz., twenty-grain doses three times daily—there was no reduction of temperature, and no decided alteration in the course which the disease took, the daily rise of temperature being the same as before quinine was administered. The 3rd point, that the hæmorrhagic tendency (which is one of the symptoms of the disease) was not in any way arrested by the use of perchloride of iron. Point 4 was shown in the inability of turpentine to stay its progress, and which seemed to show that iron and turpentine would be beneficial in those cases in which the blood had not altered from its natural state, but that both were useless in conditions such as arose in leucocythæmia. The 5th point was that aperients were worse than useless. The author concluded by pointing out the possible connexion between the disease and eczema. All the cases he had met with had been preceded by that disease, and he asked members of the Society to give a good trial to arsenic in any cases which might come to their notice, and to publish the result, but not to waste their energies in using bromides, quinine, salicin, iron, turpentine, stimulants, or narcotics.—*London Lancet*.

HEPATIC ANÆMIA.

THERE is an hepatic anæmia, that is, an anæmia produced by hepatic disorder. This form of anæmia is remarkably common, in fact the commonest form; and all cases of anæmia without any apparent cause are hepatic. The alkalies, especially potash, have a beneficial action on the liver, which action tends to restore

the blood to its normal character. The alkalies ought to take the place of iron in the treatment of anæmia. Potash has a much greater affinity for oxygen than soda out of the system, and probably it is the same inside the system. In using the alkalies we must not limit ourselves to symptoms localized in the digestive track, such as a furred tongue, loss of appetite, acid eructations, flatulence, heartburn, etc., for there are conditions where none of these symptoms are present, and yet where the alkalies are beneficial and curative. Perhaps the best known indication that is not local, consists in the abnormal urinary sediments, whose formation is prevented by alkalies. It is the same often with gouty pains, and with many cases of eczema and other skin eruptions. The morbid condition is caused by a disorder of the liver, which is not directly connected with digestion so much as with the blood. We may give the alkalies to improve the tone of the digestive system, increasing the appetite, aiding the liver to work, promoting the flow of bile, and clearing the blood and urine from lithates, or sediments and impurities. If the alkalies can effect this, then assuredly they are tonic. The pigment of the urine is derived from the biliary pigment; and the sediments, from the digestive tract, or, as Murchison more correctly limits it, from the liver. If the alkalies clear the urine from these pigments and deposits, it must be by virtue of a salutary action on the liver. Certainly the most important action of potash is on the liver, and especially on that function of disintegration on which excretion depends, and the elimination of bile, consequently the good effects are seen, not locally only, but universally. In what manner it acts on this organ may be questionable; perhaps the oxidation theory may be correct. In anæmia the best results are found from potash from the beginning to the end of the disease, and by it the author hopes to cure most of the cases he treats, unless due to tubercle, or secondary to some incurable lesion. The alkalies produce no depressing action; but when given continuously for long periods the patient or the patient's stomach sickens at them, the

same as it might do at any other monotony. Dr. Nicholson is in the habit of prescribing the bicarbonate of potash in twelve to twenty-grain doses, four times a day, continuously for months, combining with it the spirit of chloroform, which enables it to be better borne. He has failed to trace any connection between pyrosis and the continuous administration of potash, and regards the idea as traditional and not supported by unbiased observation.—*New York Medical Journal*.

RUPTURE OF THE DUODENUM FROM A BLOW ON THE ABDOMEN.

Two days since I was called to see a man, and while walking to the house, received the following history: The patient aged about forty-five, in good health, went out about two hours after eating his breakfast, to catch a horse which was grazing in the yard. He approached the animal from behind, and when just in the act of placing his hand upon him received a severe kick in the abdomen. The horse was heavily shod, and dealt a quick strong blow with the left hind foot. The man made his way to the house, and in fifteen minutes thereafter I saw him.

He was rolling in most intense agony, and referred the pain to the umbilical region. The extremities were cold, the pulse small, and he presented that array of symptoms which belong to shock. After placing him in bed, having his extremities rubbed with hot flannels, and administering about an ounce of whisky containing fifteen drops of the tincture of opium, reaction came on. But the pain continued, and it was a notable observation that it was, if possible, intensified by the whisky and laudanum. An examination of the abdomen disclosed no evidences of injury. The skin was neither bruised nor broken, and the abdominal muscles were in hard contraction.

A short time afterward I administered a quarter of a grain of morphia hypodermically, and continued to exhibit the drug in this manner as frequently as seemed admissible. But the patient was never free from pain. Six hours after receiving the injury

he was persuaded to take a small quantity of beef soup, but the stomach promptly rejected it.

At the end of twelve hours the patient's strength began to fail, and nineteen hours from the time of injury death released him from the intense suffering. The bladder had twice emptied itself of healthy urine, and there was no perceptible swelling of the abdomen.

Five hours after death I made a post-mortem examination, with the following result: Upon opening the abdomen a considerable quantity of bloody serum presented itself. The peritoneum was markedly injected, and lymph was already deposited upon the small intestine. Within the mesentery and within the peritoneal cavity, and surrounding the duodenum, was found a dark semi-fluid mass, which proved to be the partially digested contents of the duodenum. A careful examination of the intestine in the midst of this mass disclosed a rent into which the finger could be easily introduced. The opening was about two inches below the pylorus. Particles of beefsteak were found in the effused mass, and the whole was colored with bile and had a fresh, acid odor. Drs. Cowan and Johnstone, of this place, were present at the autopsy.

The following conclusions seem to be justified: The blow was received about two hours after the ingestion of a hearty meal. Digestion had reached that period where the point of greatest tension was in the duodenum. The blow was given to the abdomen as a whole, and the abdominal viscera were driven against the vertebral column. The rupture occurred at the point where the tension was the greatest. The autopsy also explains the increase of pain by the administration of whisky and laudanum, as these articles evidently passed through the pylorus into the peritoneal cavity. The case also illustrates the rapidity with which, under certain circumstances, inflammatory action spreads over the perineum.—Lewis S. McMurtry, M. D., of Danville, Ky., in the *Louisville Medical News*, April 27th, 1880.—*Med. and Surg. Reporter*.

ACCIDENTS THAT HAVE BEEN OBSERVED TO FOLLOW THORACENTESIS BY ASPIRATION PRACTICED FOR THE REMOVAL OF PLEURITIC EFFUSION.

N. P. DUNDRIDGE, M. D., thus closes an article under the above caption: The statement that this operation, mentioned in the caption, is a trivial operation, entirely devoid of danger, is to be most strongly condemned, while the practice which would undertake its performance without due regard to the conditions and surroundings, which would render accessible the most efficient means for combating any unpleasant consequences which might arise, is certainly not justifiable. Syncope has developed half an hour or more after aspiration has been performed, so that the operation should only be undertaken when complete rest and repose can be secured after its performance; for the least exertion might determine an accident, otherwise avoidable, which may prove fatal. The doctor feels himself justified in formulating the following as the accidents which have followed thoracentesis for pleuritic effusions. Some of these may be considered as mere concomitants of the puncture. Others must be held to be more or less dependent upon the operation or the measures by which it was followed: Syncope, fatal or transient, due either to reflex action or to the paralyzing influence on the heart walls of the sudden removal of the pressure of the effusion. Convulsions dependent upon reflex action or due to minute emboli in the cerebral vessels. Pulmonary congestion and œdema, suddenly developed, either with or without the rapid accumulation of serous exudation into the bronchial tubes and producing asphyxia. Embolic obstruction of the pulmonary artery of the sound lung. Embolic processes in various organs and of various grades of severity, which have their origin in clots previously in the pulmonary veins of the compressed lung. These last, when they occur at the time of or soon after the operation, may have been excited by it. When they develop days afterward, they must be held as incidents of the original trouble, and in no way connected with the operative

measures taken. In this *resume* mention of a transformation of a serous into a purulent effusion is purposely omitted, because it was thought that the proof is insufficient to hold the operation responsible for the change from serum to pus. No case of serious accident from wounding the lung seems to be recorded. While the conclusions are not new, the doctor thinks that they will bear repetition, and that surgeons cannot be too careful in undertaking this operation.—*Detroit Lancet*.

COUGH PRODUCED BY ACCUMULATIONS IN THE EAR.

THE patient, a singularly robust young lady, consulted me in regard to a cough of some three years' standing. The cough was loud, incessant and peculiarly hollow. It was dry, unaffected by times of day, seasons, or weather. It deprived her often of rest at night, and rendered her a source of annoyance and anxiety to her friends. She had consulted various medical men, and had taken almost every conceivable patent medicine, including some powerful sedatives, without obtaining even slight relief. The heart and lungs proved, as I had expected, to be healthy. The functions of the uterine, gastro-intestinal, and renal systems were stated to be strictly normal. There were no symptoms indicative of the presence of entozoa. The condition of the throat was natural; there was no relaxation of the uvula. I had come to the conclusion that the cough must be of a hysterical nature, when it occurred to me to examine the ears. The left membrana tympani was plainly visible and healthy. The state of the right one was hidden by a dark mass. On touching this mass with a probe, through the speculum, the patient's peculiar cough was immediately produced, and by keeping up a very slight, steady pressure on it, a fit of coughing, not unlike a violent paroxysm in whooping cough, resulted. By the aid of a large ear-syringe and a weak, hot alkaline solution, a piece of hard wax, *fons et origo mali*, was with some difficulty produced. It weighed over three grains. I followed up the syringing by

the use of Politzer's apparatus. The cough ceased, and though some weeks have now elapsed, it shows no sign of returning.—A. E. Bridger, M. B., in the *Lancet*, March 6, 1880.

OXALATE OF CERIUM AS A COUGH REMEDY.

BEFORE the New York Therapeutical Society, Dr. Albert H. Smith reported cases illustrating the different degrees of success obtained in the use of oxalate of cerium in the treatment of cough. The conclusions reached were as follows:

1. Oxalate of cerium could be safely administered in doses of 10 grains three times a day for many days in succession.
 2. The only unpleasant symptoms when so used was slight dryness of the mouth, that appeared after several days.
 3. It was probably the most efficient when administered dry upon the tongue.
 4. Its effects were not produced until two or three days after its use was begun and lasted for two or three days after the remedy was discontinued.
 5. It was most efficacious in the treatment of chronic cough, and the initial dose should be 5 grains.
 6. In the majority of cases it had not proved an efficient cough medicine for any considerable length of time, but could be regarded a valuable agent to be employed in alternation with other remedies.
 7. It did not disturb the stomach; on the contrary, it relieved nausea and improved digestion.
 8. Different preparations upon the market were not of equal value, and when success was not obtained by one, another should be substituted.—*Medical Record*.
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SIGNS OF DEATH BY DROWNING.

MM. Bergeron and Montano (*Annal d' Hygiene*,) have arrived at the following conclusions on the subject of death by drowning: 1. The presence of frothy foam, not only in the pharynx

and the larynx, but also in the bronchi, is the constant sign of death by submersion, whether syncope or asphyxia predominated in the mode of death, and whether the individual was free in his movements or was thrown into the water after having been made insensible by opium or chloroform, or was partly suffocated, or was fettered in his action. This absolute constancy of the presence of foam, whatever the special condition in which the submersion occurred, is, in the opinion of the authors, the single sure uniform sign proving death by drowning 2. There is always a certain degree of congestion, and sometimes subpleural ecchymoses are seen; but these ecchymoses, which give the lungs a spotted or speckled look, are unlike the punctate ecchymoses of suffocation. 3. The intensity of the hyperæmia, and the extent of the ecchymoses, are always in proportion to the efforts of the animal while struggling against submersion. It is the same also with the human subject, as has been verified in all necropsies made by the authors at the morgue in Paris during the last ten years. This fact permits one at a necropsy to learn concerning what passed in the last moments of life, to know whether or not the individual struggled long and vigorously during the act of drowning.—*British Medical Journal*.

EXPECTANT TREATMENT IN CARIES OF THE ANKLE IN CHILDREN.

DR. GIBNEY, of the Hospital for the Ruptured and Crippled, New York, from an analysis of thirty cases of this disease, draws the following conclusions :

1. Many children annually undergo amputation of the foot for caries of the ankle, when by conservatism and a proper amount of respect for the *vis medicatrix naturæ*, the member could be saved, the child be spared the mortification of being thus hopelessly maimed, and surgery itself be ennobled.
2. Excision as a rule is not attended with as good results in children as authorities have led us to expect, and is *rarely ever justifiable*.

3. Partial excisions, the passage of tents through the joints, and other operative procedures offer no advantages over the expectant plan.

4. Nature herself, unaided by art, gets useful limbs, but as a rule, ankylosis varying in degree and deformity more or less marked.

5. The expectant plan of treatment, fully carried out, assures us of more results that are perfect, and more limbs that are useful without the aid of support, than does any other plan known to the profession.—*American Journal Obstetrics*, April, 1880.

VACCINIUM CRASSIFOLIUM AUT REPENS.

DR. E. A. ANDERSON, of Wilmington, in the North Carolina *Medical Journal* directs attention to this remedy as a diuretic in obstinate cases of dropsy from hepatic or cardiac disease in patients, broken down by intemperance and innutrition, or the result of poverty, vice and old age. It is a creeper growing in low, upland Savannahs, in moist, damp places, and in the margin of ditches, and closely resembles the uva-ursi of commerce. It is used in infusion or decoction. Its diuretic properties may be increased, and a very pleasant sub-acid beverage prepared by using cream of tartar, loaf sugar and lemon with ice. Dr. Anderson reports several cases in which he has observed marked effects from the use of this remedy, and also gives the endorsement of medical men who have obtained satisfactory results in cases of dropsical effusion. The vaccinium can be obtained by writing to John K. McIlhenny, druggist, Wilmington, N. C.

THE ENTIRE UTERUS TORN FROM A PUERPERAL WOMAN WITHOUT FATAL CONSEQUENCES.

DR. SCHWARTZ reports in Spiegelberg's *Archiv of Gynecologie* a case in which the midwife in attempting the removal of a retained placenta, had grasped the inverted fundus, dragged it

down, and tore the whole organ from the vagina. Escape of the intestines was prevented by a tampon saturated with salicylic acid. On the fourth day the woman was free from fever, and by the twenty-first had fully recovered. At the latter date exploration of the vagina showed its walls to be perfectly united at its upper extremity. The woman has since then continued in excellent health.—*Berliner Klinische Wochenschrift*, No. 3, 1880. *Cin. Lancet and Clinic*.

THE *Philadelphia Medical Times* gives the following :

Some time since, a young assistant, desiring to be very painstaking, brought as the result of one night's watching of a very serious case nearly a quire of closely-written foolscap, of which the following is a sample :

" 1.15 A. M. The patient is seen to slowly rise from his bed and seat himself upon the chamber, where he remains with much straining and looks of anguish for some minutes. 1.30 A. M. He has returned to bed. 1.35 A. M. Examined the pot. Nothing in it."

To which a note might be well appended, "Examined the assistant's head. Nothing in it."

DECREASE IN BODILY WEIGHT AFTER EPILEPTIC ATTACKS.

P. KOWABEWSKI, Medicinskoje Obosrenje, October, 1879, (abstract in St. Petersburg *Med. Wochenschr*). By regular daily weighing of epileptics, during their attacks as well as in the intervals, the author comes to the following conclusions :

1. In all epileptics and in all kinds of epilepsy there is a decrease of body weight after each attack, corresponding to its duration and intensity.
2. In old cases in which the attacks were very frequent, and the organism has become accustomed to them, the decrease is very slight after each attack ($\frac{1}{2}$ pound Russian); in recent cases,

on the other hand, in which the attacks occur as yet but seldom there is a notable decrease (3-12 pound) after each attack.

3. When several attacks follow one another in quick succession, the greatest loss of weight follows the first one; that after the succeeding ones being very slight.

4. The greatest loss of weight in all forms of motor or somatic epilepsy is found after epileptic convulsions (*grand mal*) equaling some times 12 pounds after a single attack; it is very much less after epileptic vertigos. But the greatest loss of weight is met with in psychic epilepsy, in which case it may equal one-fourth of the whole body weight.

The recovery of body weight after the attacks follows very quickly, requiring only a few days.—*Journal of Nervous and Mental Diseases*.

THE TREATMENT OF POTT'S DISEASE BY THE PLASTER-OF-PARIS JACKET.

IN the *Boston Medical and Surgical Journal*, of May 13, Dr. Bradford, in an interesting communication, reaches the following conclusions:

1. Plaster jackets are efficient in Pott's disease, when caries is below the level of the middle of the scapula.
2. The efficiency is not due to fixation alone, nor to extension in the proper sense of the term, but to fixation in an improved position. This improved position is usually obtained by suspension, but also in many cases by recumbency.
3. The treatment by plaster jacket requires care in the application of the bandage. A poor plaster jacket will do harm, deceiving patient and physician.

IRON AND DIGITALIS.

It is often very desirable to give these remedies together. A mixture of the tincture of the muriate of iron, tincture of digitalis and dilute phosphoric acid is the best formula. The acid prevents the formation of the tannate, and is useful in case there is any stomachic disorder.

LIABILITY OF HOSPITALS IN MALPRACTICE SUITS.

THE Supreme Court of Rhode Island, according to the *Maryland Medical Journal*, December, 1879, has recently decided that hospital corporations should be considered liable for failure to exercise reasonable care in selecting skillful, competent men as internes. This decision grows out of a case where suit for malpractice was instituted against a Rhode Island Charity Hospital, by a patient whose fingers were cut off by a circular saw. Hemorrhage was excessive, and was only controlled by the use of the tourniquet, which instrument was kept on for seventeen hours. The result was the arm was amputated at the shoulder joint, the patient affirming that careless treatment upon the part of the interne, had induced the result. The court directed the jury to give a verdict for the defendant, on the ground that a charity institution should not be made liable for negligence or unskillful treatment. The case was taken to the Supreme Court, with the above decision.—*Medical News*.

RAPID CURE FOR A COLD.

R. RUDOLF reports, in the *Gazetta Medicina Italiana*, the following observation made on himself. Being seized with a severe coryza, he happened to chew one or two twigs of eucalyptus, at the same time swallowing the saliva secreted, which had a bitter and aromatic flavor. To his surprise he found that, in the course of half an hour, the nasal catarrh had disappeared. Some days later he was seized with another attack from a fresh exposure to cold, when the same treatment followed by an equally fortunate result. He then prescribed the remedy to several of his patients, all of whom were benefited in the same way. He believes that this treatment is only suitable in acute cases.—*British Medical Journal*, Jan, 24, 1880.

HARVARD MEDICAL SCHOOL.

THE prosperity of the Medical School continues and increases. In 1878-'79 the number of students increased ten per cent., and

the excess of receipts over expenditures was \$9,540.07, although each of the clinical instructors received an honorarium, which was a new charge upon the school. The number of students who possess literary or scientific degrees has doubled in ten years, and now amounts to 48 per cent. of the whole number.—*President Ellicott's Report.*

PER-VAGINAL ENUCLEATION OF THE UTERUS, WITH SPONTANEOUS
CLOSURE OF THE PERITONEAL OPENING WITHOUT SUTURE.

BY L. C. LANE, M. D.

ABOUT the 1st of February, I was consulted by a lady from Stockton, affected with an epithelial cancer, seated in the neck of the uterus. The history was the usual one of pain in the pelvic region, excessive menstrual flow, &c., for which she had consulted Dr. F. W. Todd, some time previously. Having become satisfied that the case was one of malignant disease, and one only to be met by surgical means, Dr. Todd advised and performed ablation of the affected portion of the cervix. Recovery was rapid, and for a time, it seemed probable that the disease had been cured. About the last of January, however, signs of recurrence manifested themselves, when through the advice of Dr. Todd, the lady was sent to this city. On examination, I concurred in the diagnosis of epithelioma, which it should have been stated, had been verified by a leading microscopist, and I advised enucleation of the entire organ.

This operation was done at Stockton early in February, by myself and Drs. Todd, Ruggles, Eddy, Phillips and Farnum, in the following manner: The woman being placed on her side, the posterior vaginal wall being retracted by Sim's speculum, and the uterus being prolapsed by traction with Pean's tenaculum forceps, an opening was made through the fold of Douglas, when the fundus uteri was caught with the extracting forceps, and made to so revolve about its transverse axis that the Fallopian tubes and ovaries were brought low down in the pelvic ex-

cavation in such a manner that the base of the tubes and accompanying arteries became accessible and easily ligated. Ligation was done with strong silken cord, so passed through button-holes in the broad ligaments that they could not afterwards slip off. This portion of the operation was completed in fifteen minutes, but the detachment of the organ from the bladder was long and tedious, but finally successfully done, without opening that viscus; yet so thin was the remaining vesical wall that the luster of the catheter which served as a guide, at times could be seen. The organ being removed, the pelvic excavation was rinsed out with a one per cent. solution of carbolic acid; a Nelaton flexible catheter was placed in the bladder; the pelvic excavation was filled with lint saturated with four per cent. carbolized linseed oil, and the abdomen covered with India rubber ice-bags. A drainage tube was so fixed alongside of the carbolized lint as to allow the escape of any fluids which should be passed out from the wounded surface. Under this mode of treatment, convalescence proceeded uninterruptedly towards recovery, which happy event was greatly favored by the assiduous and intelligent watching of the patient by Dr. Todd.

This, my second enucleation of the uterus per vaginam, differs from the first in this, that here the peritoneal cavity was freely opened, so much so that more than once during the operation the omentum protruded and had to be returned; and afterwards, no attempt was made to close the breach left in the peritoneum.

Though, as Don Quixotte says, "one swallow does not make a summer," yet I think it will be allowed that it is something of an approach towards it; and hence, from the results thus obtained, enucleation per vaginam may claim precedence equally with, or even over decollation, scooping out and supra-pubic ablation, for the treatment of uterine epithelioma. For decollation leaves a part of the affected internal mucous membrane behind, since the disease rapidly climbs up to the fundus on the inside. Scooping is like one blindfolded trying to catch an enemy whose eyes are open; and the traumatic assault upon the

organism in the abdominal section is much greater than that where removal is effected per vias naturales.

Besides the advantages just offered, a brief excursion into the domain of physics furnishes a few more in behalf of this mode of removal. Thus, when the dynamic energy of respiratory work is estimated, we find that two-thirds of it, to wit, the inspiratory effort, is favorable to drainage; and even during expiration the resistance of the intestinal gases hermetically closes the abdominal cavity. To the favorite method of scooping, to which Sims, the greatest of living gynecologists, has recently given such an impetus, the objection may be offered that the truncated vessels remain in the solid uterine tissue as so many doors wide ajar, through which the fugitive bacteria, monads, panum's poison, or what not, can find unchallenged ingress. But in the mode pursued in the above case, the wounded surface remaining is loose and relaxed, favorable to contraction of the blood vessels, and unfavorable to lymphatic circulation, as the experiments of Ludwig in regard to sanguineous and lymphatic circulation have demonstrated.

March 6th. Through Dr. Farnum, who has just visited Stockton, I learn that the patient has so far recovered that Dr. Todd, the attending physician, has discontinued his visits; also that after the lapse of the first week, the vaginal tampon and drainage tube were dispensed with.—*Pacific Med. and Surg. Journal.*

SPECIAL COMMUNICATIONS.

IS IT PROFESSIONAL?

MR. EDITOR: I desire to ask if the conduct of a physician of this city, as I relate it, is professional, that I may be able to judge rightly of such conduct, should I again find myself treated in a like manner. I was called by parents to see a sick child; for all I know I gave satisfaction; the child was better after a

day or two; my bill was paid, and the understanding was, if the child became worse, I was to be sent for. The same evening symptoms which I had spoken of to the parents, appeared, and I was hastily called, but was out of my office; the parents alarmed sent for another physician. For some reason, unknown to me, the last physician is retained; whether by the express wish of the parents only, or whether they were influenced in any way by the new comer, I know not. I met the father a few days after on the street, and he told me what I have related, casually adding that the principal remedy I had given was continued, while the conversation showed that some symptoms, which I had recognized, had been impressed upon him, as vastly more important than I had thought them, or expressed them to be.

In the code of ethics of the Massachusetts Medical Society, adopted Feb. 4, 1880, appear the following "principles and rules of action for their (members) guidance and convenience." Rule II says: "The kind of competition which might be considered honorable in business cannot exist among physicians without diminishing their usefulness and lowering the standard of the medical profession." Rule IV says: "in his relation with another practitioner and his patient, a physician should be governed by strict rules of honor and courtesy." Rule IV, § 1-2-3, says: "§ 1. A physician should take no steps with a view directly or indirectly to divert to himself the patient or practice of another physician.

"§ 2. If formally requested to take charge of a patient or family, usually attended by another physician, he should consent to do so only after notifying the latter—unless the case be one of pressing necessity.

"§ 3. If a physician is called during the temporary absence * * of another physician, * * he should direct the former be sent for as soon as he is able to take charge of the case."

I know we are not governed by the *rules* of the Massachusetts society, but are we not by the same *principles* of "strict honor and courtesy?"

I am a young man, and the loss of this patient to me is an important matter; the physician who succeeded me has been in practice many years, and, to him, I suppose the gain of my patient was a small matter; but, we accidentally met the next morning, as he was going into the house of *our* patient, and he passed me without notice. If the principles here given are not recognized among Buffalo physicians; if ordinary business competition is the rule; if selfishness, and all the underhanded methods of getting one another's patients, so well known to all, or, so easily learned, are the guiding principles among us, I want to know it early in my career, so that I may meet trickery by being forewarned, and be able to do what I can, as I grow to practice, and perhaps to influence, to instill a higher principle of "honor and courtesy" among us. But, if these are the rules, which I very much doubt, there are, as I have found out in my short experience in Buffalo, many who fail to keep them, for, in several somewhat similar cases, I have been treated with singular "honor and courtesy" by some of our oldest and most influential physicians. I write sincerely, for I am truly ignorant, when I ask the question "Is it professional?" Can you tell me, Mr. Editor?

A YOUNG PHYSICIAN.

SOCIETY REPORTS.

THIRTEENTH ANNUAL MEETING OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK,

HELD IN ROCHESTER, N. Y., MAY 18, 1880.

DR. FREDERICK HYDE, of Cortland Co., President, in the chair. About one hundred delegates and permanent members were in attendance.

The meeting was called to order soon after 10 o'clock, A. M. The minutes of the last meeting were read and adopted.

The President announced the standing committees, viz :

On Credentials :—Drs. Alfred Mercer, of Onondaga ; J. N. Arnold, of Wayne ; E. H. Howard, of Monroe.

On Business :—Drs. J. V. Kendall, of Onondaga ; H. F. Bennett, of Ontario ; James Chapman, of Orleans.

On Reception :—Drs. Darwin Colvin, of Wayne ; E. W. Armstrong, of Orleans ; C. S. Starr, of Monroe.

On Ethics :—Drs. E. M. Moore, of Monroe ; W. W. Potter, of Genesee ; G. W. Palmer, of Wyoming.

On Publication :—Dr. J. W. Palmer, of Ontario ; H. C. Tompkins, of Orleans ; The Secretry, *ex-officio*.

The Treasurer, Dr. Alfred Mercer, of Syracuse, made his annual report, which showed a balance of about \$140.00 in the treasury.

He moved that a prize of——dollars be offered from the funds of the Association for the best original paper on some medical subject.

Dr. Rider moved as an amendment, that a committee of three be appointed by the chair, to consider the matter of prize essays, and to report during the afternoon session. Resolution as amended, carried.

The President appointed as such committee, Drs. Alfred Mercer, M. W. Townsend and Darwin Colvin.

Dr. E. W. Armstrong then read a report of four fatal cases of diphtheria in one family.

Dr. Frank Kenyon followed with a paper on the treatment of diphtheria, giving special prominence to salicylic acid.

Dr. J. W. Palmer considered an elevation of temperature as favorable, rather than an unfavorable symptom in diphtheria.

Dr. James Chapman read a paper on the treatment of fracture of both bones of the leg. He advised the bent position of the knee, open splints, and frequent inspection. Extension should be made in most cases. Rigid bandages should not be used too early or too long, since there is danger of obstruction of the veins.

Dr. Gregory Doyle then exhibited appliances of his own devising, for the treatment of club-foot and similar deformities. A patient was shown with the apparatus applied.

Dr. Hovey read a report of a remarkable ovarian cyst, presenting also the pathological specimen.

Dr. J. Dunn read a paper on some of the physiological effects and therapeutic uses of henbane, opium and belladonna, separate and combined.

Dr. E. M. Moore exhibited several subjects of resection of the joints and other similar operations.

Adjourned for dinner.

AFTERNOON SESSION.

After listening to the annual address of the President, the Association proceeded to the election of officers with the following result :

President, Dr. J. V. Kendall, of Onondaga ; 1st Vice-President, Dr. C. M. Kingman, of Wayne ; 2d Vice-President, Dr. L. J. Ames, of Livingston ; Censor to Syracuse University, Dr. Darwin Colvin, of Wayne ; Treasurer, Dr. Alfred Mercer, of Onondaga ; Secretary, Dr. J. N. Arnold, of Wayne ; Delegate to the British Medical Association, Dr. A. Clifford Mercer.

Dr. Dimon, of Auburn, was requested to write an obituary notice of the late Dr. Gilmore, of Fleming, and Dr. J. W. Palmer was appointed to do the same in the case of the late Dr. Webster, of East Bloomfield.

The following named were elected permanent members :

Monroe County, Drs. J. O. Roe, Wm. Eves. Oswego County, Drs. G. W. Nelson, Ella M. Whitaker. Onondaga County, Drs. H. B. Allen, I. H. Searls. Cayuga County, Drs. B. K. Hoxie, Frank Putman. Wyoming County, Drs. G. M. Palmer, J. A. Post.

The following named were made eligible for permanent membership :

Livingston County, Drs. J. W. Gray, F. H. Moyer. Genesee County, Drs. W. W. Potter, J. V. Mullen. Wayne County, Dr W. Putnam.

Dr. Mercer, Chairman of Committee on Prize Essays, reported as follows :

Resolved; That the Association offer a prize of twenty-five dollars, for the best paper on "The needed legal reforms, regulating the study and practice of medicine." Also a prize of twenty-five dollars for the best paper on any medical subject. Subject to be chosen by the writer. For either prize the writer must be a member of one of the societies represented in this Association.

A committee of three shall be appointed by the President, to report, at the next annual meeting, on the papers presented for the prizes.

The report and resolution were adopted.

A paper was then read by Dr. J. O. Roe, on nasal stenosis and its treatment by the galvano-cautery.

At 5 o'clock, P. M., the Association adjourned to meet in Rochester, November 16, 1880.

CHARLES E. RIDER, Secretary.

EDITORIAL.

TWO POINTS IN THE HISTORY OF A CASE.

The failure of a physician to observe accurately the symptoms of a patient, so often leads to erroneous conclusions, as to be seldom deemed worthy of comment. An instance is referred to in the *Medical Record*, of May 15, which is so typical as to serve as a text for such a sermon as might be preached to many a well-meaning but misguided practitioner.

It appears that a Dr. Neftel, of New York, had conceived the notion of curing cataract by means of electricity; so he brought his batteries to bear upon the eyes of an old lady, whose crystalline lenses were partially opaque, but whose imaginative powers were of high order. The doctor, in reporting the case, says that "after each sitting the patient declared she could see more plainly. After one week, she declared herself able to read coarse print pretty well, and after two weeks she could read

quite small print. After twenty-five applications the treatment was discontinued. The patient declared that not only had she recovered her earlier seeing power, but also needed weaker spectacles than before." It so happened that the lady was well known to the editor of a certain religious weekly, published in the same city, and this, together with another "wonderful cure of cataract," was forthwith paraded before its confiding subscribers. In one issue of this journal, the small corner vouchsafed to "Science," was entirely monopolized by an account of the almost miraculous results obtained by this skillful electrician. But unfortunately for ophthalmology and for the growing reputation of this gentleman, a couple of our most eminent oculists have published a statement, tending to throw discredit upon this brilliant triumph of galvanism.

In the number of the *Medical Record*, already alluded to, there is a letter signed by Doctors Agnew and Webster, in which the case in question is carefully reviewed, and in regard to which they say: "It will be observed that Mrs. M. had incipient cataract when she first came to see me on the 24th of July, 1878; that she had incipient cataract on the 14th of April, 1880. In the interval between those dates she had received galvanic treatment from Dr. Nefel. The vision of Mrs. M. was $\frac{2}{3}$ before the alleged cure, $\frac{2}{3}$ after the alleged cure, and sufficient to enable her to read Jaeger, No. 1, at fourteen inches on the 15th of April, 1880. The case is simply one of those common ones of stationary, or slowly increasing opacity of the lenses, and we must calmly wait for new light, if we are to change our belief that galvanism will not remove opacities of the crystalline lenses." A reply followed in the next number of the *Record*, in which Dr. Nefel charged the error in diagnosis upon the gentlemen mentioned. But as ill luck would have it, still another oculist entered the lists to cast greater suspicion upon the success of the method.

It was almost unkind thus to dampen the ardor of an enthusiastic electrician by such pointed references to dates, and to the

details of exact measurement. But the moral is plain. If less reliance had been placed upon the statements of the patient and more upon careful investigation of the actual condition, the imaginary improvement would not have been credited. Moliere, by his drama of the *Malade imaginaire*, has treated many a Frenchman to a hearty laugh at the medical profession, and so must physicians expect to be ridiculed if they rely too implicitly upon the statements of their patients.

And while one phase of this case has in it a lesson to the physician, there is another which relates to our friends of the clerical profession. Just as the religious journal was quick to proclaim the wonderful cure, so are clergymen in general too ready to lend their credence and weight of authority to nostrums of every kind. There is hardly a patent medicine advertised, that cannot boast of testimonials from eminent divines. The degree of their "gullability" as to things medical, is simply astounding.

It is this hasty judgment from insufficient data—this morbid yearning for the miraculous, which makes skeptics in medicine as it has made skeptics in theology.

THE AMERICAN MEDICAL ASSOCIATION.—THIRTY-FIRST ANNUAL MEETING.

TO NEW YORK city belongs the honor, the present year, of entertaining the members of the medical profession, gathered together in National Council to discuss important questions relating to medical science. The fact that the Association meets in the Metropolis, which is the recognized medical, as it is the commercial and financial centre, of the country, will attract hither large numbers, and it is safe to predict an unusually profitable and interesting meeting.

In the various sections, a large number of valuable papers will be read by the most eminent men in the profession, the discussions eliciting an active interest from those, who are fortunate to be able to lend an attentive ear.

The suggestion made by the *Medical Record*, that papers should be read in abstract, will, if heeded, give a wider scope and greater opportunities for ambitious writers, while it will lend additional interest and value to the proceedings.

The social entertainments given under the direction of the New York profession, will be on a scale of generous magnificence, we have no doubt, and will show the cosmopolitan character and ability of the men who now adorn the medical profession of that city.

We hope to gather from its proceedings valuable material for future numbers of the JOURNAL.

UNITED STATES POSTAL LAWS AND OUR SUBSCRIBERS.

THE near approach of the close of the present volume of the JOURNAL leads us to direct attention to the law regulating the relations between publisher and subscriber. Delinquents will find in the perusal of this law profitable suggestions as to their duty, from which we hope to receive some evidence in the form of remittances. Many on our list having failed to notice the polite reminder in the form of a bill enclosed in a previous number, we take the liberty to repeat the hint, and therefore send with this JOURNAL our bills to all subscribers who are in arrears. We need not again assure our readers that while we strive to furnish a superior periodical, we hope their appreciation will be manifested in prompt payment of their subscription.

1. A postmaster is required to give notice *by letter* (returning a paper does not answer the law) when a subscriber does not take his paper out of the office, and state the reasons for its not being taken. Any neglect to do so makes the postmaster *responsible* to the publishers for payment.

2. Any person who takes a paper from the post office, whether directed to his name or another, or whether he has subscribed or not, is responsible for the pay.

3. If a person orders his paper discontinued, he must pay all arrearages, or the publisher may continue to send it until payment is made, and collect the whole amount, *whether it be taken from the office or not*. There can be no legal discontinuance until the payment is made.

4. If the subscriber orders his paper to be stopped at a certain time, and the publisher continues to send, the subscriber is bound to pay for it *if he takes it out of the post office*. The law proceeds upon the ground that a man must pay for what he uses.

5. The courts have decided that refusing to take a newspaper and periodical from the post office, or removing and leaving them uncalled for, is *prima facie* evidence of intentional fraud.

REVIEWS.

A Treatise on Foreign Bodies in Surgical Practice. By ALFRED PAULET, M. D., Adjutant Surgeon-major, Inspector of the School for Military Medicine, at Val-de-Grace. New York: William Wood & Co. 1880.

This work, one of Wood's Library of Standard Medical Authors, in two volumes, is quite a novelty, in so far as nothing analogous has ever been published. We have here a large and complete work, gathering together what formerly could only be found with difficulty in journals, monographs, or scattered through the larger surgical works. The author considers in this work only the foreign bodies of the natural passages, while he promises later to treat the two other groups, foreign bodies, which enter the economy by "effraction," or are fixed to the surface of the parts. The book will be of great value to every physician, the more so as foreign bodies are an accident, which every physician occasionally is called upon to treat. M.

Headaches; their nature, causes and treatment. By WILLIAM HENRY DAY, M. D., Member of the Royal College of Physicians. of London, Physician to the Samaritan Hospital for women and children. Third Edition with Illustrations. Philadelphia: Lindsay & Blakiston.

The wide prevalence of headache, under a great variety of forms and conditions, and the unsatisfactory results of medical treatment, will attract to this work the attention of the profession. The views advanced by the author are the result of notes and observations carefully recorded, and extending over a

period of many years. The author also strives to make the work practically useful, by adopting the division of headache into several varieties, showing the differential diagnosis in the anæmic forms and the hyperæmic, the characteristic features of sympathetic, of bilious, or dyspeptic, nervous, toxæmic, gouty, rheumatic headaches, &c., &c. A careful examination of the book gives a most favorable impression of its merits and of its practical utility, in the investigation of Cephalalgia. We recommend it to such of the profession, who, if not victims of the disease and the conditions of which it treats, are frequently called upon to relieve sufferings due to this cause. L.

The Principles and Practice of Gynæcology. By THOMAS ADDIS EMMETT, M. D., Surgeon to the Woman's Hospital, &c. With one hundred and thirty illustrations. Philadelphia: Henry C. Lea. 1879.

The author announces in the preface that this work is essentially a clinical digest, and includes the results of individual experience for twenty-five years in the treatment of diseases of women. In addition to opportunities offered in a very extensive private practice, Dr. Emmett summarizes in this work his experience in the Woman's Hospital, of which for many years he has been the recognized surgeon-in-chief. From such a wide field the accomplished author has enjoyed rare facilities, through which he has demonstrated the ability and skill which has placed his name among the most distinguished gynæcologists of the present day.

There is much to commend in every chapter, and in attempting a review, the writer especially desires to direct attention to the philosophical manner in which every subject is treated. Dr. Emmett deals in facts and bases his conclusions upon fundamental principles. He avoids useless theories, unfolds his reasons in clear and concise language, condenses in tabular form important data in regard to various conditions to which special study and observation have been given, and as the result fur-

nishes the most valuable and complete work ever offered to the profession in the special department in which he has labored.

The subjects treated in this volume comprise almost every condition met with in gynæological practice.

The chapters devoted to Uterine Displacements show clearly the author's ingenuity in dealing with a most difficult condition. His views on the etiology and treatment of flexures and versions, the objects, uses and adjusting of pessaries, the influence of menstruation in flexures, &c., are singularly clear and practical, while the surgical measures recommended are based upon sound and well-established principles.

Dr. Emmett lays stress upon laceration of the cervix uteri as a condition too frequently overlooked, except by the specialist. He justly states that "its importance cannot be over-estimated, since at least one-half of the ailments, among those who have borne children, are to be attributed to this cause."

The extensive experience of the author in vesico- and recto-vaginal fistulas gives special interest to the chapters which are devoted to this accident of the puerperal state. Probably no other surgeon operates with so much skill and with such surprising results. He embodies his views very fully in this work, devoting ample space to this condition, and shows his own plan of operating in a very clear and lucid manner.

These few selections from the many subjects treated in this valuable work will suffice to show how well Dr. Emmett has performed the duty of furnishing the profession, from his abundant storehouse of experience and knowledge, a guide to the study and treatment of diseases of women.

We are proud that American skill and ability is thus utilized in an honest effort to advance the interests of an important department of medical science.

L.

A Practical Treatise on Sea-sickness ; its Symptoms, Nature and Treatment. By GEORGE M. BEARD, A. M., M. D. New York : E. B. Treat, 707 Broadway. 1880.

Dr. Beard presents a very excellent monograph upon a disease which has not been studied as much as, in these days of

foreign travel, its importance demands. He affirms that sea-sickness is a functional disease of the central nervous system, and the treatment proposed is based upon the etiology he endeavors to establish. The author has given so much study and thought to nervous diseases, that whatever issues from his pen is entitled to respectful consideration from the profession. L.

Sore Throat, its Nature. Varieties and Treatment; including the connection between affections of the throat and other Diseases. By PROSPER JAMES, M. D., Lecturer on Materia Medica and Therapeutics at the London Hospital, etc. Fourth edition Illustrated with hand-colored plates. Philadelphia: Lindsay & Blakiston, 1880.

This is the fourth edition of a well-known little work, a fact which shows the favor it has found with the profession. Some changes have been made, and four new chapters, about syphilitic sore throat, affections of the naso-pharynx, connection of sore throat with affections of the nose and the ear, affections of the œsophagus, have been added. The work is a handy book for reference, and is well worth reading. M.

BOOKS AND PAMPHLETS RECEIVED.

Handbook of Physical Diagnosis. By Dr. GUTTMANN, University of Berlin. Wm. Wood & Co.

Examination of Urine. By JAMES TYSON, M. D. 3d Edition. Presley Blakiston.

Handbook of Medical Chemistry. By WM. H. GREENE, M. D., University of Pennsylvania. H. C. Lee's Son & Co.

Report of Public Schools of Maryland.

Anniversary Address before the N. Y. State Medical Society. By H. D. DIDAMA, M. D.

The Fallacies of Popular Clinical Medicine. By JARVIS S. WRIGHT, M. D. Long Island College Hospital.

The Black Arts in Medicine. By JOHN D. JACKSON, M. M.

The Utricular Glands of the Uterus and the glandular organ of the new formation which is developed during Pregnancy in the Uterus of the Mammalia, including the Human Species. By Prof. GIOVANNI BATTISTA ERCOLANI, Permanent Secretary of the Academy of Sciences of Bologna, &c.; to which is appended his monograph upon the unity of the anatomical type of the Placenta in all the mammalia, and the physiological unity of the nutrition of the Fœtus in all the vertebrates. With a quarto atlas of fifteen plates, engraved by Bellini and reproduced by the Heleotype Process. Translated from the Italian under direction of Henry O. Marcy, A. M., M. D. Houghton, Osgood & Co., Boston. The Riverside Press, Cambridge. 1880.

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ORIGINAL COMMUNICATIONS.

HINTS RELATIVE TO INTRA-UTERINE MEDICATION.*

BY JAMES P. WHITE, M. D.,

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It is not the purpose of this paper to consider the pathology or therapeutics of intra-uterine diseases, but to point out simply some of the means which have, in the writer's experience, been found valuable and important in the proper application of remedies to the surfaces within the neck and body of the uterus in diseased conditions already recognized. It is believed that a somewhat detailed description of these measures will be found acceptable to all practitioners in this important department of medicine.

In making applications of fluid substances to the uterine cavity, the most simple method would appear to be by injection, and this method is still advised in the treatises and periodicals of the day. On page 159 of the *Obstetrical Journal of Great Britain and Ireland* for June, 1879, the injection of carbolic acid and water, pure nitric acid, and other liquids is advised in various diseases of the cavity of the uterus. While the most potent

*Read before the American Gynecological Society, 1879.

caustics, as fuming nitric acid, might be applied in full strength to the mucous membrane of the neck or body of the uterus, modifying the condition of the diseased surfaces without exciting grave symptoms, no liquid, however bland, can be injected into the uterine cavity without the liability of exciting terrific uterine colic, if nothing more serious. The experienced practitioner seldom or never injects medicinal agents into the cavity of the uterus. It becomes, therefore, important often to enlarge the canal of the neck, even when of normal size, in order that medicaments may be applied to the lining membrane of the body when in a morbid condition, and in stenosis or contraction of this canal the dilatation becomes absolutely necessary.

The means most commonly resorted to for the purpose of dilatation is the employment of tents, made so as to be introduced when dry and compressed, the absorption of moisture producing expansion and dilating the canal. Believing the tents made of sponge preferable, all things considered, to those made of any of the various substitutes, attention will be directed to that variety only.

The tent, as ordinarily made, is exceedingly imperfect, and is frequently made from coarse sponge which has scarcely tenacity enough to hold together. Good soft sponge, of uniform consistence, should always be selected for this purpose. They should be nearly cylindrical in shape, so as to dilate the canal of the neck uniformly, slightly conical at the point to facilitate introduction, and about one and three-fourths inches in length. Each tent should have a longitudinal perforation at its base to receive the instrument, to be described hereafter, for introducing it. More important than all, they should contain in the centre, running quite to the small and internal end, and securely fastened thereto, a small twine or wire, preferably the latter, the end of which should pass out of the base of the tent to sufficient length to be easily grasped in removing it. Securing the cord or wire quite at the extremity is of the highest importance. It has frequently occurred to the writer to have the tent part in

the middle, when making an attempt to remove it, by the twine fastened in the usual way only at or near its base. Few things are more embarrassing to the operator than to find himself called upon to remove the upper half of a tent thus retained at the os internum. Forceps, introduced however carefully, can scarcely be opened and fixed upon the fragment, or, if it be seized, owing to its friable nature, the operator is obliged to bring away a small portion at a time. Failing to seize the retained portion, it is pushed in front of the forceps into the uterine cavity, necessitating complete dilatation of the os and neck before it can be secured and removed.

A single case will be sufficient to illustrate an annoyance which can easily be avoided by proper arrangement of the string or wire, but which was the result of using a sponge tent as at present constructed.

Miss B, aged 18, with severe dysmenorrhea, accompanied with profuse catarrhal discharge from the os, had a moderate-sized sponge tent introduced in the evening, which was found fully expanded the following morning. A cylindrical speculum was introduced and moderate traction made on the string attached to the base of the tent, but only about three-fifths of the tent was drawn out. In an effort to extricate the retained fragment, it was pushed forward into the cavity, and could not be removed without further expansion of the canal. The forceps could be introduced into the os and passed up to the retained sponge, but could not be opened so as to grasp it. Menstruation being near at hand, it was deemed wise to omit further efforts towards its extraction until after that period had passed. The flow came on a day or two subsequently, was free, and without any of the terrible suffering to which the patient had been accustomed. Her general health rapidly improved, and the patient persistently refused to permit any further efforts to be made for the removal of the retained sponge, and after a full explanation of the annoyance and danger which it would be certain to occasion, returned to her home in Canada, some hundred miles distant.

In about six months she returned for its removal, assuring me that notwithstanding all her efforts at cleanliness with the free use of deodorizing vaginal injections and washes, the discharge had become so offensive and profuse that she was obliged to seclude herself, and her own family would not tolerate her presence.

A large tent was introduced in the afternoon, and the following morning the canal was so fully dilated that I was enabled to seize the specimen, which I here show you, and remove it without pain or difficulty.

The piece of sponge here exhibited is useful in illustrating the little change that had taken place during its retention of more than six months in the uterine cavity, and how futile would be any delay in expectation of its disintegration or expulsion by uterine contraction.

Other similar cases could be cited, but this is quite sufficient to show how important it is that the wire or twine for the extraction of sponge tents pass entirely through them, and be secured at their apex so as to command the entire mass of expanded sponge.

The tent may be bent to accommodate its form to the flexions which may be present. It may be covered with gold-beater's skin, with tin foil, or with some gelatinous material, to facilitate introduction and to prevent irritation of the mucous membrane, but not with tallow or rancid cerate. By constructing the tent of sponge, as here described, in accordance with the specimens exhibited, it becomes a safe means of overcoming stenosis, and the operator will not be liable to meet with the accident just described.

It has already been stated that the tent should have a perforation at its base, into which the point of the tent holder could be inserted. It will readily be seen that the operator has much better control of the tent by this holder than when held by forceps, as often recommended. The movable coil of wire around the stylet enables the operator to dislodge the tent,

when in position, without in the least disturbing its relation to the parts. The instrument should be bent to conform somewhat to the pelvic curve. The whole procedure may be made through



a cylindrical or Sims' speculum, or upon the finger without either. Sims' hook, with a long handle, is often very useful in holding the uterus forward and straightening the canal during introduction. The hook, if properly used, seems also to help the operator to pull on, as it were, the glove.

It will often be found that time will be saved in the process by incising the lining membrane of the neck before any attempt is made to dilate. It is not necessary to make deep incisions, nor should they be as superficial as recommended by the lamented Peaslee in an article on stenosis, written shortly previous to his death. These incisions are best made with the long, slender blades here shown, and their depth is to be governed by



the skill and judgment of the operator, and not by a mechanical hysterotome.

By resorting to these incisions, the canal is rendered much more dilatable, the endo-metritis of the neck lessened, and if prudently made, there is no danger of hemorrhage or pelvic abscess.

Whether the process of dilatation be preceded by tents or by the knife, or both, sometimes without either, the dilator here



exhibited may be frequently used to dilate the canal or keep it patulous.

No matter by what process the dilatation is primarily accomplished, the canal is almost certain to contract, and even to become narrower than prior to treatment, unless regularly dilated for a considerable period subsequent to the first operation. The instrument here shown possesses many advantages over any other with which I am familiar. It is as easily introduced as Simpson's sound. The dilating force can be applied as gently as desired; *it is elastic and continuous, and may ordinarily be continued and increased for any length of time without pain.* This instrument, which I have now used for more than thirty years, is very simple in construction and inexpensive. The amount of pressure is regulated with a screw, and is entirely under the control of the operator. Having dilated the canal, and the passage of instruments of moderate size now being practicable, we shall find the long probe of hard rubber or whale-bone, first used, I believe, by Professor Miller, of Louisville, Ky., and by him called an applicator, very useful. The point is easily coated with cotton or muslin, which can be saturated with any desirable medicament, and applied to the uterine membrane. The cotton or muslin is then easily removed and fresh material substituted. Thus armed, this probe is very convenient for removing from the membrane the catarrhal coating which absolutely prevents the application of substances to the surface until removed. The rag or cotton may be saturated with vinegar, which will coagulate the albuminous secretion and facilitate its removal. It may be here remarked, also, that acetic acid or common vinegar should always be at hand for removing sanguinolent or other matters which interfere with inspection or treatment of the os or canal. Vinegar is a good astringent, coagulates, as already remarked, the albumen, removes muco-purulent discharges, and does not discolor the surface to which it is applied. Hence, in an examination with cancer or epithelioma in a hemorrhagic condition, dossils of cotton saturated with vinegar, applied to the surfaces on a probe or in forceps, will be found exceedingly convenient. The applicator or probe above described is not

only useful in applying various remedies to the uterine mucous membrane by means of cotton or muslin saturated with these and wrapped about its point, but it may be coated for a short distance with nitrate of silver, deposited upon its surface by crystallization.

For many years I have been accustomed to use nitrate of silver, either in substance in the ordinary crayon, or the still milder crayon used by oculists, or the points of Squibb, secured in rubber tubing. Notwithstanding that I have caustic-holders of gold, platinum, hard rubber, and various other materials, for many years, I have used exclusively the rubber tubing of various sizes. It holds the crayon firmly, is so flexible that, bending at the point of junction between the forceps or staff and the pencil, it adapts itself to the flexions of the canal without fracture of the crayon, as would be apt to occur in a rigid holder. This form of holder affords no opportunity for the instrument maker to display his taste or fill his exchequer, being almost without cost and readily made by any novice. The crayon and rubber holder may be slipped into a larger tube, taking the precaution to insert a stick alongside to prevent bending and fracture, and in this way it may be conveniently carried in the pocket and be always ready for use. This arrangement is unexceptionally safe and convenient, but lacks the attractiveness of more expensive paraphernalia, and will never be introduced to professional notice by the instrument makers.



Glass tubes or rods drawn to a point, similar to the extremity of the uterine probe, may be roughened and made a useful vehicle for carrying caustic fluids into the neck of the uterus, and there applying them. Sufficient nitric acid or saturated solution of chromic acid, or similar caustics, will adhere to this ground glass applicator for an ordinary application to the mucous membrane. Glass is for many reasons superior to all other

materials for the handling and transmission of caustics, when it can be used, and it is inexpensive. But the cavity of the uterus cannot be reached with fluid on these glass or rubber probes. The narrow canal of the neck wipes off or removes any medication on the surface of the probe, and it reaches the body of the uterus after parting with its surface coating in its passage. As has already been stated, injections; properly so-called, are inadmissible. Many instruments, uterine specula, canulæ, etc., have been devised for carrying caustics and other remedies up to the cavity of the uterus, without in their passage unnecessarily coming in contact with the membrane lining the canal of the neck.

After much reflection and many unsatisfactory trials of various methods of overcoming the difficulty, I made a trial of a small glass tube, drawn out at one extremity and curved in the form of the uterine sound. In this tube I could carry any desired number of drops of fluid by simply dipping its extremity to the proper depth in the liquid. By placing my finger or thumb over the opposite end, the fluid was easily retained as long as the air was excluded. The tube thus charged was carried up through the neck, and by careful manipulation its contents deposited upon the membrane lining the cavity. This procedure was somewhat difficult, and required the exercise of great care not to allow the finger to be prematurely removed from the end of the tube, and thus deposit the fluid upon surfaces where it was not desired. Some years since I placed the small rubber air-bulb which was found on the end of a pipet-drop glass over the end of my long tube, and secured it there by means of twine. This arrangement proved eminently satisfactory. By means of the bulb I could easily draw up any desired number of drops, which were retained until made to exude by gently compressing the bulb. The point of this glass tube may, by a little gentle movement, be carried to different parts of the membrane, and the fluid deposited or spread over the surface. This method of applying substances cannot properly be called an injection any more than when applied by a sponge or dossil of

cotton. The inner surfaces of the neck are not touched by the fluid, as in carrying up the armed probe ; more than that, you can deposit a definite number of drops with almost perfect accuracy in any desired locality. Again and again have I carried up a definite number of drops, from three or four to thirty, of fuming nitric acid, and deposited them gradually upon the inner surface of the uterine cavity. It is proper here to remark that, while I am not an advocate of the frequent resort to this heroic treatment, when used as here described, I have never known it productive of serious consequences. It is astonishing with what impunity the most powerful caustics may be thus applied to the inner surface of the uterus, while the most bland and anodyne solutions cannot be injected into the cavity without, in a certain proportion of cases, producing the most alarming symptoms. All gynecologists are aware that the potential cautery can be applied to the os and neck with but little pain, and is rarely followed by grave symptoms, although by no means always producing the desired result. The same rule will hold true with the application of caustics in fluid form, providing they are used in the manner indicated. After several years of trial of this simple glass instrument, I am prepared to say that I believe it indispensable in the treatment of intra-uterine disease, and commend it to the favorable consideration of members of this Society. Many friends have been induced to make trial of it during the last few years, and with but one voice lauded its utility. It may be used to carry up any liquid substances deemed desirable for introduction into the uterine cavity.



It need scarcely be again remarked that its contents must invariably be dropped, and not expelled or injected. This is easily regulated by graduating the pressure on the rubber bulb.

It remains to call attention to another method of intra-uterine treatment which is often found of incalculable service in arresting hemorrhage or serous discharges in granular or polypoid developments on the uterine mucous membrane.

The curette of Recamier is, in the writer's opinion, far superior to the "modern improvements" or substitutes. The instrument recommended by Dr. Sims is too small, and is utterly inefficient. Peaslee's may answer in some instances, but I fail to perceive that it is in any respect superior to the one originally recommended by Recamier, and the same may be said of all the modifications introduced by various operators. The instrument can be much more conveniently used if made, as here shown, longer than originally designed. The edges, while they should have sufficient sharpness to remove the bead-like growths studding the membrane, should not be so sharp as to endanger the deeper structures.

The danger of deep wounds is guarded against by curving well the inner or cutting edge of the spoon-like margins.



In these desultory remarks it has been my object to call attention to methods and means which in my hands have proved of value in the treatment of intra-uterine disease. They are not hastily recommended to the Society, but are the result of long and careful observation.

Indeed, this article, calling attention to the instruments and appliances herein described, is written in compliance with a request of some of the oldest and most successful practitioners among the Fellows of this Society, and without claiming that all the measures here recommended are new to the profession.

A NEW OPERATION FOR THE "RADICAL" CURE
OF HYDROCELE.*

BY BERNARD BARTOW, M. D.

THE following operation for the so-called "radical" cure of hydrocele, I have employed in two instances, with such satisfactory results as to lead me to believe there are some points of value in the method, and particularly, in its application to cases which have resisted the means ordinarily employed for the relief of this disease. The operation consists of an incision from three to four inches in length, in the scrotum—in the centre of the hydrocele tumor,—extending through the scrotal subcutaneous tissues until the sac is exposed. The loose connective tissue is then separated from the sac to the extent of about an inch either side of the line of the incision, exposing about one-third the circumference of the tumor—the distended sac protruding into the wound, renders this last step very easy of accomplishment. Into the most depending part of the tumor thus exposed, a fine trochar and canula is introduced, and the fluid is drawn off; the entire wound being left to close by granulation. It is intended that air shall not be admitted into the sac; and it is preferable to make the incision with antiseptic precautions, and to continue them during its subsequent treatment. In the two cases where this plan was used, the first was a large hydrocele that had received no previous treatment, the second case being one in which repeated tapping had been performed; both patients were young married men between thirty and thirty-five years of age. The clinical features following the operation were very similar to those following the injection of the sac with tr. iodine. In both instances the sac had refilled by the fourth day. Resorption was complete by the tenth day in case 1; in case 2, however, I did not wait for this event to follow, but re-tapped the sac through the wound on the sixth day, after which it did not re-fill. The degree of inflammation in the scrotal subcutaneous tissue and sac was quite active in the first case, but

*Extract from a paper read before the Buffalo Medical Club, April 28, 1880.

the free incision of the operation prevented any tension in the part, and there was no sloughing of scrotal tissue, or any other untoward feature. On this occasion no special antiseptic measures were observed.

In the second case, however, strict antiseptic precautions were employed throughout, with the effect to confine the inflammatory action within very moderate limits. I was strongly impressed with the influence antiseptics exerted in subduing the subsequent inflammation, by the fact, that in this instance the dissection of connective tissue from the sac was much greater than in the first case, and this, without some modifying agent, would have resulted in a much greater degree of inflammatory action in the part. The extent of constitutional disturbance was indicated by a rise in patient's temperature of 1° above normal, and the local appearances were such as indicated a slight but general implication of the entire sac and surrounding tissues in the inflammatory process.

In the first case the patient was kept quiet until the tenth day, while patient No. 2 was confined to his bed for one day only—that following the operation. In both cases the scrotum was supported by a suspensory during the time the incision was healing, which latter was complete by the fourteenth day. At the end of nine months there was no sign of the disease returning in case 1, while in case 2 the sac had not refilled during the period of four months that it was under observation. Following the operation in both cases, the testicle was movable in its sac, showing that obliteration of the sac did not take place.

The idea upon which this operation is based, is that of identity and continuity of the connective tissue composing the sac, with the less dense connective tissue which would be described as lying *outside* the sac; and that by exciting inflammatory action in this *outside* connective tissue, it will extend to and involve that composing the sac, by continuity of structure. By wounding and disturbing the parts in close relation to the sac, we thereby apply the irritant upon its outer surface, and by the re-

sulting inflammation induce those changes in the vascular system of the part, upon which would seem to depend the restoration of the normal secretion of the tunica vaginalis. Admitting that the changes resulting from the inflammation principally affect the vessels supplying the part, it would seem by this method that we could quickly and with certainty induce those changes, by acting thus directly upon the tissue in which the vessels are imbedded.

In view of the fact that there are a considerable number of cases of hydrocele, in which injection with tr. iodine fails to accomplish a cure, and that these cases (if they obtain relief) become subjects for more objectionable and severe operations, I think there are advantages in the method here advanced, that will recommend it as a substitute for either the seton or the operation of incising the sac—the method usually employed after failure with tr. iodine injection. It is free from the dangerous constitutional disturbance liable to follow inflammation in an open serous sac—as in the case where a hydrocele is incised; and the prolonged suppuration attending obliteration of the sac by incision, is superceded by that which would follow from a superficial wound only. By preventing access of air to the interior of the sac, the liability to suppuration within the sac is almost nil; this principal danger being avoided, the method would seem to possess the conditions by which inflammation could be excited with safety in the sac and surrounding tissues.

CLINICAL REPORTS.

A CASE OF CONSERVATIVE SURGERY.*

REPORTED BY J. W. KEENE, M. D.

January 17, 1880, Jacob Spohn, aged 17, a healthy German boy, was caught by the forearm between cog-wheels in a barrel manufactory. He was brought to Dr. Briggs' office, where an

*Reported to Medical Club.

examination was made. He was sent to his home and visited immediately by Dr. B., who requested my assistance. The ulnar border and anterior aspect of the forearm was denuded of integument from the palm to the upper third; at the wrist there remained but an inch of skin over the radial border; the denuded space narrowed gradually upward; the skin hung in three strips one and a half inches wide over the border of the arm, with corresponding space between of the same width where the integument was entirely removed, thus showing the nature of the gearing in which the limb was caught; there were also two abrasions of the same width higher up, with similar spaces of intact skin separating them. On the palmar surface the wound extended an inch and a half into the palm, involving the entire width of the hand, dipping deep into the palmar tissues, and laying bare the flexor tendons over the wrist joint; the radius and radial artery were intact; the lower third of ulna was fractured in three places, and the laceration of the soft tissues rendered the fracture compound; the ulnar artery was severed, but the hemorrhage was not excessive; the temperature and sensation in the hand were good. On consultation it was decided to try to save the arm, although both physicians were doubtful of success. The patient and friends were informed that amputation might become necessary in a day or two, but that an attempt at preservation should be made.

Chloroform was administered; the lacerated tissues trimmed away; the lower third of the ulna was excised, and the proximal end of the ulnar artery found and ligated; the distal extremity eluded search. The anæsthetic was well borne. The arm was extended on a pillow covered with oil cloth, and tepid water dressing applied. Syrup of Dover's powder in dram doses was prescribed, and the patient was left in a comfortable condition.

Thirty-six hours later the arm was doing well, and was ordered dressed with tepid solution of carbolic acid—one dram in an ounce of glycerine to a pint of water.

Jan. 24. The arm was looking well. No slough of importance, but copious discharge of healthy pus from the entire gran-

ulating surface; cicatrization already established along the edges. There has been but slight constitutional disturbance and very little pain.

April 22. Patient was seen by me in Dr. Briggs' office. Wound all healed two weeks ago. Fingers moderately flexed, the little finger more than the others; it is also cold and has but little voluntary mobility. The other fingers have three-fourths of normal motion, the wrist joint one-third. Pronation is complete, supination fully three-fourths of normal. The defective motions are improving daily.

A DEATH DURING THE ADMINISTRATION OF CHLOROFORM.

The following account of a case of death, on May 18th, from the effects of chloroform during its administration previous to an operation, and which excited an unusual amount of interest among both the profession and the general public, is condensed from the very full account in the *Buffalo Courier* of the testimony given at the coroner's inquest.

The deceased was a man of about 40 years; the operation was for stone in the bladder, though one physician, who examined him five or six weeks previously, found a large stone in the urethra, where one was found at the autopsy.

Patient's health was somewhat affected by his disease; he was nervous and anxious in regard to the operation, and expressed fear of taking chloroform, and requested ether; this request was made to others, but not to the operator. The heart was examined by the surgeon a day or two before the operation, and also by another physician several weeks before, both of whom declared the organ normal. The chloroform (which was Squibb's, and carefully examined by a chemist after the operation and pronounced pure) was first administered by the operator, and after about ten minutes handed to an assistant; it was poured from a small bottle, about thirty minims at a time, on to a folded napkin. Before becoming totally unconscious, the patient sprang

from the table, and struggled violently with those holding him ; suddenly his strength gave way, and he said he would get back on the table, then sank on to the floor and ceased to breathe ; artificial respiration was immediately begun, and continued half an hour without avail. It appeared that both principal and assistant were accustomed to give chloroform, and that the drug was administered with care. An autopsy was made, and the brain and organs, except the heart, found to be healthy ; "the muscles of the heart seemed a little pale ; on pressing, it pitted and tore as easily as wet blotting-paper ; there was fatty degeneration of the heart ; the muscular fibres were filled with what is called fatty granules ; there was slight disease of both valves, but in all probability not sufficient to be detected during life." It was in evidence by another physician, although not reported so in the paper, that the condition was one of fatty infiltration, but nothing was said by this examiner of degeneration ; the pulse was strong and full a few minutes before the patient sprang from the table.

The following is the verdict :

That the said Frederick J. Turner came to his death from fatty degeneration of the heart, while inhaling the vapor of chloroform preparatory to undergoing a surgical operation solicited on his part. That the inhalation of said vapor caused great excitement and muscular effort which, together with the fear of the operation, were the exciting causes of his death. The jury further find that the chloroform was a proper anæsthetic, and was administered in a careful and skillful manner, and that the attending physician took the necessary precaution to make a physical examination before giving the anæsthetic, and he and his assistants are exonerated from all censure.

TWIN LABOR—DOUBLE VERSION.

BY P. W. VAN PEYMA, M. D.

IN the *Buffalo Medical Journal* for September, 1879, is the report of a case of twin labor where both children presented by

the arm. This case, occurring in the practice of Dr. Edwin Borck, of St. Louis, was first reported in the *Obstetric Gazette*. As an introduction to the report, we published a table taken from Cazleaux, showing the various presentations obtained in 329 twin labors. In not one of these cases did the first child present transversely. We also remarked at the time that "many other writers fail to mention cases of this character, and otherwise ignore the subject. In regard to the difficulties encountered in turning the first child, it is almost impossible to find anything in treatises upon midwifery."

On the night of May 16th, I was called to see Mrs. S., aged 36, in labor for the sixth time. Her former labors had been easy and wanting in any particular points of interest. A quite intelligent midwife in attendance informed me that the patient had been sick for a number of hours; that the os was dilated to nearly its full size, with the membranes bulging, but that she had been unable to find any part of the child presenting. After having satisfied myself of the truth of these statements, I proceeded to assist the patient. I slowly introduced the hand between the membranes and the walls of the uterus; the umbilical cord, pulsating vigorously, was first encountered; next a hand was felt, and soon, having nearly reached the fundus, both feet were arrived at. After pulling these down a short distance, the hand was passed through the membranes, the child turned, and delivered with little difficulty. It was now discovered that a second child lying transversely and in a separate amniotic sac, still remained. It was easily delivered in a similar manner, the placenta soon following. The children, somewhat undersized, were both alive and apparently healthy.

SELECTIONS.

A NEW THEORY OF THE ACTION OF MERCURY.

DR. S. V. CLEVINGER, in the *Chicago Medical Gazette*, proposes a new theory of the action of mercury.

The *modus operandi* of mercury, in common with that of many other drugs whose effects are so manifest and direct, has heretofore received no satisfactory explanation. The theories advanced have been largely mere conjectures. Dr. Clevenger's theory is that mercury acts purely mechanically, and the experiments he records in support of his views certainly seem to corroborate these views. That metallic mercury applied externally may enter the circulation, is not doubted by the physiologist, the demonstration of the possibility being a standard physiological experiment. Dr. Clevenger's theory comes in conflict with that usually entertained (if it may be said that any theory is generally accepted) in the dealing with salts of mercury. He maintains that these salts are reduced either before absorption or soon after, and that as salts they do not circulate, their being no recombination after the primary decomposition. The metallic mercury in the blood is carried unchanged into the glandular tubules, and forces its way to their blind extremities, and by their superior weight displacing the occupants of these tubules, be they normal or morbid matter. In this manner mercury acts as a deobstruent on the same principle as that in which cannon balls dropped into a pipe removes matter of lesser specific gravity. In the intestines the increased peristalsis excited by the foreign substances facilitates the progress of the minute globules, and their reaching the hepatic parenchyma. The presence of the mercury in the salivary glands stimulates their secretion, and being a foreign substance seeking for egress, sets up the changes characteristic of mercurial salivation.

"Mercurials load the circulation and emunctories with effete matter because of their deobstruent effects and ability to insinuate

their particle among all tissues, separating the morbid or ulcerated portions from the healthy, by the great and universal law of heavy bodies acting in the line of 'least resistance.' If the bile is improperly diverted or suppressed, it restores it, by opening the channels through which it normally flows ; if superabundant from organic obstruction, it would regulate its quantity in the same way by affording exit for morbid causes. Its aplastic action is ascribable to the capillary and lymphatic cleansing its passing would produce ; the million minute globules pushing open circulatory channels and preventing accumulation, as well as affording means for absorption. Provisional callous and wound-healing would be interfered with by globules breaking up new tissue and interfering with its formation, as would any foreign substance. Mercury has been retorted over in considerable quantities from the bones of those who have died from mercurial cachexia, the little particles finding stopping places in the cancellated tissue removed from more active circulatory influences, and, in excess, doubtless dissecting away the periosteum, filling the lacunæ and canaliculi, thus unavoidably producing caries.

"The occasional tonic influence of the metal would follow wherever glandular obstruction was superinducing diminution of the red blood corpuscles, as insomnia may be overcome by bromides removing the cause, while no one assigns the bromides a place among hypnotics.

"Mercury is not a tonic ; but if it increases secretion, removes obstructions and sets the corpuscular manufactories in order, as it does the biliary, it induces tonicity as the bromides induce sleep.

"But mercury also causes anæmia, which might be expected by persisting in its use, remembering its occlusive power in closing the minute passages and tubular structures which, in medicinal quantities, removed pre-existing obstructions.

"Mercury in larger doses diminishes the number of red blood corpuscles and produces anæmia, emaciation, ulceration, febrile

symptoms, with a peculiar 'jerking, thready' pulse. Obviously an effect which might be salutary upon the glandular system, wrought by small doses, could become pernicious by overdoses, and hæmatosis be seriously interfered with by the vascular stasis induced by mercurial plugging of the arterioles and venioles. Any irritation causing perversion of the hepatic and splenic functions, certainly could only be followed by hæmic degeneration, and I am inclined to think that the pulse characterizing hydrargyria is due to the irregular but frequent propulsion of blood by *vis a tergo* clearing of the lesser vessels, where the metallic globules had for a while backed up the current until forcibly overcome. This brings us to the consideration of the nervous phenomena among its toxic effects.

"As to the so-called 'specific' reputation of mercury in syphilis treatment and its *modus operandi*, I might be excused detailing probabilities until the pathology of the complaint is better understood. The disposition of the virus being to centralize itself upon and destroy certain areas, it seems likely that the metal may, by attacking such weakened points, not only break them down, but prevent the static degeneration necessary for ulcerative processes. This, with the antagonism the metal has for occlusion anywhere, except what it induces itself in great doses, would suffice as a tentative view until we demonstrate exactly the cause of both the disease and its cure.

"The incendiary can do no harm to society while the police are alert and keep him 'moving on.' Syphilis, though in the blood, may not manifest itself if sufficient globules are chasing it from forming nuclei; but where the fluids of the body are saturated with syphilizing points enough to produce tertiary symptoms, how futile must any attempt be to restore health by any doses of the drug under consideration. The disease itself is depleting the system at this stage, and mercury but adds to the trouble, having more carious and degenerated spots to work upon.

"In short, at this period both syphilis and mercury will fraternize against the body as against a common enemy. Tonics might arrest the cachexia induced by either or both, and in addition the iodides which are known to act upon this disease and its putative cure should be given."

Dr. Clevenger's views have the advantage of being definite, at least, and their plausibility will, we think, be very generally conceded, although they may fail to satisfy. They are certainly noteworthy, and have in them the possibility of a revolution in the therapeutics of many diseases for which mercury and its salts have been empirically and blindly administered.—*Michigan Med. News.*

A CRUCIAL TEST OF HOMŒOPATHIC MEDICINES.

IN the New York *Homœopathic Times* for March, 1880, is an account of a series of experiments instituted for the purpose of testing the effects of the thirtieth dilution of tincture of aconite. The project was set on foot in Milwaukee by a homœopathic society and carried out with great care. In the words of the originators, "the object of this test is to determine whether or not this preparation can produce any effect on the human organism, in health or disease." "A vial of pure sugar pellets, moistened with the thirtieth Hahnemanian dilution of aconite, and nine similar vials moistened with pure alcohol, so as to make them resemble the test pellets," were given to the prover, who was not to know which of the ten vials contained the aconite. The vials were numbered from 1 to 10, and the prover was to administer them to individuals, sick or well, and to detect by the effects which of the vials contained the medicine. It was provided that "the provers must be physicians of decided ability, who possess a good knowledge of the recorded symptomatology of aconite, and who have faith in the efficacy of the thirtieth dilution." The project was widely announced, and the ten-vial package was sent to each of twenty-five homœopathic

physicians applying for them, scattered over a dozen different States. To guard against all possible fraud or trickery, the Rev. Geo. T. Ladd, Professor of Mental and Moral Philosophy in Bowdoin College, Maine, was selected to distribute the vials to applicants, and to receive reports from them.

Now, all this was not only decidedly fair, but it was highly creditable to those who ventured on an experiment involving so much peril to a favorite theory. One looks to the result with much interest. The result, so far as it has transpired, appears in the report of Mr. Ladd, which was not made until after the date allowed for the returns from the provers. By his report it appears that only nine of those gentlemen ventured on any answer whatever. Mr. Ladd's report is thus summarized in the general report made to the Milwaukee Academy of Medicine—the body which originated the project—and signed by Samuel Potter, M. D., President, and Eugene F. Storke, M. D., Secretary :

Number of tests applied for and sent out,	-	-	25
Number of tests which have been reported on,	-	-	9
Number of tests in which the medicated vial was found,			0

Be it remembered that these statements do not come from the opponents of homœopathy, but from its own adherents, and not from a local or partial source, but from a select body representing the more intelligent portion of the sect. We have never met with any evidence more damaging to homœopathy. True, the blow strikes only at the infinitesimal phase of the system, and not at the dogma of *similia similibus* ; but it is also true that the head and front of homœopathy is the unphilosophical, unscientific and absurd doctrine of potentization, and not the theory implied by its title.

We have observed no notice of this report except in the journal named. It would appear that a general effort has been made to suppress it. In the meeting of the New York State Homœopathic Society, lately held at Albany, the report was re-

fused acceptance. The editor of the *Times* complains of this, saying that common courtesy required its reception, though its adoption might have been refused. We do not wonder, however, at this course. The pill was altogether too bitter for homœopathic stomachs.—*Pac. Med. and Surg. Journal*.

ŒDEMA OF THE LUNGS—INTRAVENOUS INJECTION—RECOVERY.

THE patient was a male, about 36 years of age. He was brought into the hospital under the influence of liquor and put in the cell to sleep off its effects. The next day the attention of the house physician was called to him as he seemed to be suffering greatly, and he was accordingly removed to a ward. On examination, it was discovered that there was considerable difficulty in breathing and that his feet and legs were much swollen and cedematous. He gave no history of previous illness—had not been sick before the beginning of his debauch. Had been drunk for several days before his entrance into the hospital. Physical examination gave no evidence of any abnormal condition of the heart, but loud, moist rales heard over the chest in front and behind indicated the presence of extensive œdema of the lungs. The patient was obliged to assume the sitting posture in bed as the dyspnœa increased. He coughed constantly and raised a thin, frothy sputum mixed with blood. His face was red and anxious; his pulse moderately full and rapid; his breathing was very labored, and his efforts to obtain air distressing. An examination of his urine failed to reveal the presence of albumen; its color was dark, its sp. gr. 1028. The dyspnœa being urgent and requiring active treatment, cups were applied over the whole chest and whisky was given freely, but with little apparent effect. The pulse became more feeble, the face livid, the extremities cold, and the whole body was covered with perspiration. The patient was every moment becoming more restless, turning his head from side to side, bending

forward and tossing his arms about in vain efforts to breathe. Tinct. digitalis was then injected hypodermically mx. Oxygen was brought and mixed with air; it was inhaled by the patient, the tube being held to his mouth while he was directed to breathe through both mouth and nose. The effect of the digitalis was seen in a slight increase in the fullness of the pulse. The oxygen did not give the relief which was expected, and after a trial of twenty minutes was refused by the patient, who said it did no good. All the symptoms increasing, and there being added to them a frequent passage of small quantities of urine, a pill of croton oil, gr. j was given. This produced profuse liquid stools in about half an hour, with some slight improvement in the respiration. This improvement was, however, only temporary, and the dyspnœa soon became as marked as before. The patient was becoming more exhausted every moment, and the signs of carbonic acid poisoning were very evident, lividity of the face, apathy, disinclination to open the eyes or reply to questions, coldness of the extremities and face, while the pulse became more feeble and was scarcely perceptible at the wrist. As the treatment so far had seemed of but little avail, it was determined to inject aqua ammonia into the veins.

The cephalic vein was selected and exposed by a small incision, and with a hypodermic syringe fifteen minims each of aq. ammon. and aqua dest. were injected into it. The effects of the injection were felt in a few minutes, in the increased force of the pulse, while soon after the respiration became somewhat more easy. The patient was still, however, in much distress, and the dyspnœa subsided very gradually. During the following ten hours dry cups were again applied several times over the chest, and whisky and ammonia were given by the mouth. At the end of that time the breathing was much less difficult, though the moist rales could still be heard over the lower part of the chest in front and behind. Since then they have disappeared entirely, and the patient is in a fair way to recover. The absence of other causes for the œdema leads to the supposition

that it was due to failure of the heart, resulting from exposure and alcoholism. No evidence of disease of the heart, lungs or kidneys could be discovered. But the depressing influence of large doses of alcohol long continued is well known, and it is evident in this case that the stimulant action being exhausted, a reaction and consequent enfeeblement occurred, which gave rise to the congestion of the lungs and œdema. This diagnosis was confirmed by the fact that further doses of alcohol, in the form whisky, failed to produce any effect on the heart. Bleeding, which was suggested, was happily avoided, and would probably have been fatal, as it would only have increased the exhaustion, without aiding the enfeebled organ. The injection of ammonia, which has been successful in many similar cases in the hospital, doubtless was the means of sustaining life here, as improvement began soon after. At any rate it is worth a trial in these cases.

STATISTICS OF CANCER IN THE BREAST.

DR. J. OLDEKOPP has published in the twenty-fourth volume of the *Archiv fuer Klinische Chirurgie*, a statistical summary of all cases of mammary cancer occurring in Professor Esmarch's hospital and private practice from 1850 to 1878. With regard to age, most of the cases occurred between the forty-eighth and fiftieth years; in 123 patients, the age did not exceed 48; in 71, it was between 48 and 58; and, in 35, the age was 59 and upwards. In 21 cases there are no particulars as regards age. Women who had borne more than six children furnished the greatest contingent, and next came those who had no children. There were 9 in this category, against 103 who had given birth to children. In 61 cases in which the information could be obtained, 15 had not, and 46 had, suckled their children. In 36 cases mastitis had preceded; but in only 9 was it ascertained with certainty that the cancer had its starting point in an induration or cicatrix remaining after the mastitis. In 3 cases there

had been contusion with extravasation; the extravasation after some years, forming the centre of the new growth. In two cases the seat of the primary nodule was a part of the breast which had for some years been pressed on by the string of a corset; in a third, it was a part that was often pressed on by a yoke. In 126 cases the right breast was diseased, in 102 the left. The outer and upper part of the mamma was most frequently first affected; and this is ascribed by Dr. Oldekopp to the greater liability of this part to injury. In three cases the cancer was preceded by chronic eczema of the breast. Circumstances indicating the influence of hereditary tendency were noticed in eleven cases. The average duration of life from the commencement of the disease was, in the cases not operated on, 22.6 months; in those operated on 38.1 months. On 225 patients 287 operations were performed. Of these 225, there died in the hospital 28; viz., 5 from return of the cancer, and 23 from the operation; among these were 14 cases of total extirpation of the mamma with removal of the axillary glands. With regard to the influence of treatment on the mortality and on the time required for healing. Dr. Oldekopp's statistics show no marked difference between the antiseptic and the non-antiseptic methods; he remarks, however, that erysipelas has been less frequent in Dr. Esmarch's practice since the introduction of the antiseptic method. The time after the operation at which the disease returned is noted in 112 cases. In 14 cases it immediately followed the operation; in 15 it took place within the first month; in 23 within three months; in 15 within more than three and less than six months; in 13 from the seventh to the ninth month; in 14 from the tenth to the twelfth month; in 9 from the thirteenth to the eighteenth month; and in 8 within three years. In one doubtful case the interval is said to have exceeded three years. At the time of the report 44 of the women had remained free from a return of the disease; of these six had died of intercurrent diseases; three within three years since the operation, and three after three years. In 15 the time

during which they had remained free from relapse was under three years; and, assuming three years as the extreme time for a return of the disease, 26 could be regarded as definitely cured; in 10 of these the infiltrated axillary glands had been removed with the mammary cancer. In some cases a second operation was necessary. Although the number of cases in which a complete cure followed the operation is not so large, Dr. Oldekopp regards it a sufficiently encouraging to induce surgeons to operate early, and thus increase the chance of good result.—*British Medical Journal*.

THERAPEUTIC USE OF PILOCARPIN IN SKIN DISEASES.

PROFESSOR PICK, editor of the *Vierteljahrsschrift für Dermatologie und Syphilis*, gives, in the first number of his journal for the current year, some account of his experience in the use of pilocarpin in certain diseases of the skin. The drug was given in the dose of 0.01 gramme ($\frac{1}{4}$ grain) in aqueous solution, morning and evening, an hour after meals, the patient being in bed or, in summer-time, walking about. Increased salivary secretion was first observed, and a few minutes later increased perspiration. In a few cases one or the other was absent. After three or four weeks the medicine seemed to lose its effect, so that a larger dose had to be given. No evil effect was noted, and in some cases the patient's general health seemed to be improved by the medicine. In psoriasis no effect whatever seemed to be induced upon the course of the disease. In acute eczema, pilocarpin aggravated the disease, while in chronic eczema some advantage seemed to be gained by its use. In pruritus cutaneus, and particularly in one very severe case of pruritus vulvæ, pilocarpin acted favorably. In a single case of chronic and rebellious urticaria, pilocarpin, given in one-tenth-grain dose twice daily, resulted in a cure. In the case of a man suffering from well-marked alopecia areata of six months' standing, a two weeks' course of pilocarpin was followed by the appearance of

fine, colorless lanugo, and by the end of twelve weeks the hair was restored. Other cases appeared to be equally favorably affected. In ten cases of alopecia "pilyroides" a favorable result was obtained: so that this remedy may be looked upon as a satisfactory one in cases where a strong hereditary tendency to baldness does not exist.

ACTION OF VARIOUS DIURETICS.

DR. MAUREL gives the result of his experiments (*Bull. Gén. de Thérap.*, Nos. 5 and 6, 1880) as follows: 1. Nitrate of potassium, uncertain as to the quantity of liquid, augments the solid materials of the urine to a notable degree. The most active doses are a drachm to a drachm and a half. 2. Chlorate of potassium, less active with respect to the augmentation of solids, increases the fluids of the urine to a greater degree. 3. Acetate of potassium is uncertain, as to the quantity of both solids and fluids. 4. Iodide of potassium, far from being a diuretic, even seems to diminish the quantity of urine. 5. Salicylate of sodium, uncertain as to the quantity of liquid, increases the solid constituents of the urine. 6. Of three vegetable substances experimented upon,—squill, colchicum, and digitalis,—the latter alone is a real diuretic. It augments at the same time the quantity of both solids and fluids. Dr. Maurel gives it as his opinion that no diuretic acts when the system is in a febrile condition: this must be modified before diuresis can occur.

HEMORRHOIDS TREATED WITH CAPSICUM.

IN cases of hemorrhoidal congestion, Vidal regards capsicum annum as the best remedy. He prescribes four or five pills daily, each containing 20 centigrams, half at breakfast time and half at supper time. Under this influence the congestion and all the painful symptoms which accompany it disappear rapidly—Vidal in *Journ. de Med.*, Feb. 1880, p. 70.

CASES OF ABNORMALLY HIGH TEMPERATURE.

A late number of the *British Medical Journal* contains a report by Dr. Donkin of eight cases of abnormally high temperature, all but one in females, and none proving fatal. Pain was a prominent symptom in all. An abbreviated statement is subjoined:

- No. 1, 111.6°; convalescing from enteric fever.
- No. 2, 108°; no organic lesions; ovarian pain.
- No. 3, 115.8°; great abdominal pain and excitement.
- No. 4, 111°; convalescing from enteric fever.
- No. 5, 113°; enteric fever and double pneumonia.
- No. 6, 112°; synovitis. This was the only male.
- No. 7, 112°; painful stump, with necrosis.
- No. 8, 117°; pyonephrosis.

EARACHE AND CHLOROFORM VAPOR.

DR. MORGAN states that he has often promptly relieved the distressing earache of children by filling the bowl of a common new clay pipe with cotton wool, upon which he dropped a few drops of chloroform, and inserted the stem carefully into the external canal, and adjusting his lips over the bowl, blew through the pipe, forcing the chloroform vapor upon the membrana tympani.—*National Medical Review*.

OBSTINATE HICCOUGH CURED BY MURIATE OF PILOCARPINE.

DR. ORTILLE reports: "As the singultus persisted even during the sleep produced by morphine injections, and the strength of the patient was becoming greatly reduced, a hypodermic injection of half a grain of pilocarpine was at last administered. This produced abundant perspiration and salivation, and the hiccough ceased at once.—*Atl. Med. Cent. Zeit.*; *Cinc. Med. News*.

DELICATE TEST FOR ALBUMEN.

SIEBOLD has introduced a modification of the heat test which is adequate to the detection of albumen under conditions in which its presence might be completely overlooked. The following is the author's own account of the manner in which the test is to be applied: "Add solution of ammonia to the urine until just perceptibly alkaline; filter and add diluted acetic acid very cautiously until the urine acquires a faint acid reaction, avoiding the use of a single drop more than required. Now place equal quantities of this mixture in two test tubes of equal size, heat one of them to ebullition and compare it with the cold sample contained in the other test tube. The least turbidity is thus distinctly observed, and gives absolute proof of the presence of albumen."

IRISH BULLS.

THE *Maryland Medical Journal* for April contains a very interesting article from the pen of Dr. John V. Keating, of Philadelphia, entitled "A pin extracted from the throat of a child three years old," but after reading it we are surprised to find it was "extracted" from the anus—only a change of base.

THE report of an Irish Benevolent Society says: "Notwithstanding the large amount paid for medicine and medical attendance, very few deaths occurred during the year."

EDITORIAL.

CHLOROFORM VERSUS ETHER.

The sad case of death under the influence of chloroform noted in our columns this month is but one of five which have been reported in the journals as occurring during the month of May from chloroform narcosis, and as we write, the telegraph brings the account of another death in this vicinity. In all of

these cases it is claimed that the anæsthetic was administered by capable hands and with due caution. Not a few physicians, at least in this city, have a preference for chloroform, and we are accustomed to say that properly administered, there is no more danger in its use than with ether.

With our present knowledge are we justified in this conclusion? The advocates of chloroform certainly can not base their preference for its use upon authorities or statistics, for the long and painful record of valuable lives lost from the time of its introduction as an anæsthetic to the present day, has caused almost every student of the subject to take positive grounds against its general use.

The common opinion that the cause of the fatality from chloroform depends upon any particular mode of administration is not supported by a study of fatal cases, nor by a long series of experiments upon animals.

The case reported here is but one of many which show conclusively that chloroform will kill, when prior to administration the patient shows no trace of disease or other sign, by which the danger of death can be foretold. As to the difference of anæsthesia by ether and chloroform, Schiff arrived at the following conclusions after more than five thousand experiments:

“ Ether paralyzes first the respiration and after that the blood vessels and the heart, while chloroform can paralyze the heart and blood vessels at once, without previously paralyzing the respiration; artificial respiration with the latter agent is then useless, as oxygenation has ceased. Compression of the abdominal vessels and lowering of the head may be of advantage. Chloroform can cause death at the first inspiration.”

The irresistible argument, however, as to the merits of the two anæsthetics, is the result of later studies of statistics. From these we learn that chloroform destroys one person out of every twenty-five hundred who inhale it, while the deaths from ether are only one in twenty-three thousand two hundred and four. An analysis of the cases of death from ether upon which these

statistics are based, show that more than one-half of them are fairly attributable to other causes than the anæsthetic, and when we consider how carelessly it is often administered, these results almost justify us in considering it an absolutely safe anæsthetic. With chloroform, on the contrary, we are fully satisfied that no amount of care or precaution, or mode of administration, or amount inhaled, will prevent in certain cases the fatal result. In the light of this experience, and in the face of these facts, is any physician justified in resorting to the use of chloroform in ordinary cases? That there are exceptional cases in which it is the better agent, we admit; but we hold that the physician assumes a solemn responsibility who selects the more dangerous anæsthetic only because more convenient in some respects to give, and pleasanter for the patient to take, and thus unnecessarily subjects his patient to a risk, however small, of losing his life.

THE NEW MEDICAL BILL.

By the request of many of our subscribers we publish the full text of the act recently passed by the Legislature, regulating the licensing of physicians and surgeons in this State. It will be seen that the last clause of Section 6 renders the bill in some respects nugatory. We are informed that it was tacked on to the original bill in the Senate, through the influence of the Senator from Erie County. It is in the interest of unqualified practitioners and quacks now practicing in this State.

The clause in § 4 requiring all applicants to pay a fee of \$20 for the examination and endorsement of their diploma is discreditable to the medical profession of New York. A graduate of Harvard, Jefferson, or any other college outside of the State is thus compelled to pay a fee of \$20 to some, perhaps insignificant medical school in order that his diploma may be recognized as giving him a right to practice medicine in this State. In such cases at least the fee is exorbitant, and is of benefit not to the

profession, but to the colleges. A smaller fee would also remove the temptation which some faculties may have, of desiring to pass as many applicants as possible, thus facilitating the introduction of unqualified men into this State. We fear that the bill as passed will not be of much benefit to the profession.

AN ACT ENTITLED "AN ACT TO REGULATE THE LICENSING OF PHYSICIANS AND SURGEONS." PASSED MAY 29, 1880; THREE-FIFTHS BEING PRESENT.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. A person shall not practice physic or surgery within the State unless he is twenty one years of age, and either has been heretofore authorized so to do, pursuant to the laws in force at the time of his authorization, or is hereafter authorized so to do as prescribed by chapter seven hundred and forty-six of the laws of eighteen hundred and seventy-two, or by subsequent sections of this act

§ 2 Every person now lawfully engaged in the practice of physic and surgery within the State shall, on or before the first day of October, eighteen hundred and eighty, and every person hereafter duly authorized to practice physic and surgery shall, before commencing to practice, register in the Clerk's Office of the County where he is practicing, or intends to commence the practice of physic and surgery, in a book to be kept by said clerk, his name, residence and place of birth, together with his authority for so practicing physic and surgery as prescribed in this act. The person so registering shall subscribe and verify by oath or affirmation, before a person duly qualified to administer oaths under the laws of the State, an affidavit containing such facts, and whether such authority is by diploma or license, and the date of the same and by whom granted, which, if willfully false, shall subject the affiant to conviction and punishment for perjury. The County Clerk to receive a fee of twenty-five cents for such registration, to be paid by the person so registering.

§ 3 A person who violates either of the two preceding sections of this act, or who shall practice physic or surgery under cover of a diploma illegally obtained, shall be deemed to be guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than fifty dollars nor more than two hundred dollars for the first offense, and for each subsequent offense by a fine of not less than one hundred dollars nor more than five hundred dollars, or by imprisonment for not less than thirty days nor more than ninety days, or both. The fine when collected shall be paid, the one half to the person or corporation making the complaint, the other half into the county treasury.

§ 4. A person coming to the state from without the state may be licensed to practice physic and surgery, or either, within the state, in the following manner: If he has a diploma conferring upon him the degree of doctor of medicine, issued by an incorporated university, medical college, or medical school without the state, he shall exhibit the same to the faculty of some incorporated medical college or medical

school of this state, with satisfactory evidence of his good moral character, and such other evidence, if any, of his qualifications as a physicians or surgeon, as said faculty may require. If his diploma and qualifications are approved by them, then they shall indorse said diploma, which shall make it for the purpose of his license to practice medicine and surgery within this state the same as if issued by them. The applicant shall pay to the dean of said faculty the sum of twenty dollars for such examination and indorsement. This indorsed diploma shall authorize him to practice physic and surgery within the state upon his complying with the provisions of section two of this act.

§ 5. The degree of doctor of medicine, lawfully conferred by any incorporated medical college or university in this state, shall be a license to practice physic and surgery within the state after the person to whom it is granted shall have complied with section two of this act.

§ 6. Nothing in this act shall apply to commissioned medical officers of the United States army or navy, or of the United States marine hospital service. Nor shall it apply to any person who has practiced medicine and surgery for ten years last past, and who is now pursuing the study of medicine and surgery in any legally incorporated medical college within this state, and who shall graduate from and receive a diploma within two years from the passage of this act.

§ 7. All acts, or parts of acts inconsistent with the provisions of this act are hereby repealed.

Office of the Secretary of State. } ss.
STATE OF NEW YORK, }

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom and of the whole of said original law.

JOSEPH B. CARR,

Secretary of State.

BOARD OF HEALTH REPORTS.

WHEN a few months ago the Board of Health of the city of Buffalo initiated the publication of weekly reports, *THE JOURNAL* was prompt to express its approval, and our physicians generally considered it a move in the right direction. The little sheets were at first carefully read and placed on file on the Doctors' libraries. It soon became apparent, however, that as issued, they were of absolutely no value to the practicing physician, and we doubt if many of them now escape an immediate descent to the waste basket without even the formality of a removal of the wrapper. To see so much labor and money expended without

any adequate return to the city is painful, but as now conducted it might more appropriately be called a Report of the Undertakers of the City of Buffalo, than of the Board of Health.

We do not make these statements in any spirit of captious criticism. We feel that the present Health Physician deserves much credit for so far overcoming the inertia which prevails upon this subject, as to be able to make a beginning in the right direction. With professional support and co-operation it is possible even with the present constitution of the board, to effect some changes in the report which would make it of great value. It is of interest to the statistician to know that so many died of pneumonia, cancer, &c., but to be of real use to the physician and the community at large, the report must go further. We want to know the death rate for prevailing diseases, the localities where disease is prevalent, and, if possible, the causes which occasion the sickness and mortality. A great amount of useful information might be thus gathered, and our efforts to effect sanitary improvements would be greatly aided by the ability to show the people how disease and deaths occur in any locality in direct proportion to its violation of sanitary laws. In the larger cities of Europe such information as to the localization of diseases is obtained by the simple expedient of sending each week to every physician in the city a blank upon which he makes a return of every case of contagious disease treated by him during the week, with a statement of the locality, number of street, and age of patient. These blanks are distributed by the police, and by them collected and turned over to the Health Physician, who upon these data, and supplemented with reports of sanitary inspectors, makes out his weekly report.

Some such system might be adopted in this city. To fill out such blanks would take but a few minutes of a physician's time, and information of great value might be thus obtained. We would thus be able to study the causes of, and the spread of, disease. We would be able to more justly estimate the mortality and suffering for which our city fathers are largely respon-

sible, by practically compelling a large proportion of our poorer fellow citizens to use the polluted water from our public wells, and the deleterious influences on the public health of that perennial abomination, the Hamburg canal, would be soon abated if our weekly reports show that typhoid, scarlet fever, diphtheria, &c., are prevalent along the borders in much greater frequency than in other parts of the city.

The criminal carelessness which permits the continuance within the city limits of slaughter-houses and other business which may be considered in a sanitary light as public nuisances; the filling up of vacant lots with garbage, filth and dead animals; the filthy condition of the streets and tenement houses: these and many other sins against the public health would be recognized, if our little pamphlet shows how from such centres disease emanates with mathematical certainty, and how every violation of sanitary laws is followed by a sure punishment. It is only by bringing out such practical facts that we can hope to educate the people in sanitary science.

DRUGGISTS' ASSOCIATION.

A MEETING of the principal druggists in this city was held at the Tift House on the 4th of June, and resolutions were adopted favoring a permanent organization. One committee was appointed to draft a constitution, by-laws and code of ethics, and another to secure a place for future meetings. It was furthermore resolved, "That we warmly endorse the action of our representatives at Syracuse in inviting the State Association to Buffalo in 1880, and assure them of our most hearty coöperation in creditably entertaining the visitors."

Such an organization must ultimately prove an advantage and a credit to the druggists of the city, and we congratulate them in this evidence of their zeal.

THE nineteenth volume of this JOURNAL is completed with the present number, and while the editors congratulate themselves upon a certain amount of work accomplished, they also feel grateful to those collaborators who have contributed to its success. There is much satisfaction to be derived from the fact that the circulation of the JOURNAL has been very largely increased during the past year, an indication at least that the efforts are not unappreciated, whose tendency is to raise the standard of perfection ever higher and higher. The volume closes with an unusually complete index, which must prove of great assistance to constant readers, and a decided convenience to those who would wish even occasionally to consult its pages.

WE take pleasure in calling the attention of our friends to the advertisement in this issue of *Johnston's Fluid Beef*. It has received the warm commendation of many of the highest authorities in Great Britain and Ireland, as containing all the nutritive constituents of meat, and as supplying in the most easily digested form all the material necessary for renewing the tissues wasted by disease. It is now used largely by the United States government, and has been taken up by the Massachusetts General and the City Hospital, Boston, and many of the best hospitals in New York and Philadelphia.

REVIEWS.

Post-mortem Examinations with Especial Reference to Medico-legal Practice. By RUDOLPH VIRCHOW, of Berlin Charité Hospital. Translated from the second German edition, by Dr O. P. Smith. Philadelphia: Presley Blakiston, 1012 Walnut St., 1880.

A little book of one hundred and forty pages, 16 mo. with a number of illustrations. Prof. Virchow's early experiences as prosecutor in the morgue of the Berlin Charity Hospital are given, as well as the subsequent history showing the present

system of examining the bodies of the dead. He also gives the regulations at present in force throughout Germany, "for the guidance of medical jurists in performing autopsies and drawing up reports." As the translator remarks: "It is much to be wished that a method similar to the one which has received the high sanction of Prof. Virchow were adopted in this country." Although no better than Delafield on post-mortems, it is a book well worth possessing especially by those who have not already one or more recent works upon the subject. V. .P

The Pharmacopœia of the British Hospital for Diseases of the Skin.

London, 2d Edition Edited by BALMANNO SQUIRE, M.B., Senior Surgeon to the Hospital. London: J. & A. Churchill.

By the kindness of the author we have received this little work. It contains, as the title indicates, the formulæ of the special preparations used in this great hospital. Although we find, in looking over its 76 pages, almost nothing not in common use in this city, the book is of value as a compilation of well-
D.

A Practical Hand Book of Medical Chemistry applied to Clinical Research and the Detection of Poison. By WILLIAM H. GREENE, M. D., Demonstrator of Chemistry, University of Pennsylvania. Philadelphia: H. C. Lea's Son & Co.

The absolute necessity to the medical man of some knowledge of medical chemistry is conceded, but in the nature of things it is impossible that a practicing physician should be a chemist. Having, however, that general knowledge of the science without which in this day he ought not to hold a diploma, it is easy with the aid of a good hand book to acquire an acquaintance with these compounds which normally form part of our tissues, and to detect substances which are themselves the evidence of pathological action.

This is the object of Dr. Greene's book, and he has succeeded in giving to the profession a useful work. The first part of the

book is devoted to a brief consideration of the organic proximate principles taking part in the animal economy; the second part to the analysis of secretions, excretions, etc.; while the third part treats of the detection of poisons, only so far as is of value and interest to physicians. The book is well arranged, and likely to be a popular and useful one to medical men. D.

A Text Book of Physiology. BY M. FOSTER, M. A., M. D., F. R. S. Prælector in Physiology and Fellow of Trinity College, Cambridge. From the 3d and revised English edition, with notes and additions. By ED. T. REICHERT, Demonstrator of Experimental Therapeutics, University of Pennsylvania, with two hundred and fifty-nine Illustrations. Philadelphia: H. C. Lea's Son & Co., 1880.

Foster's Physiology, English Edition, has been, in our humble opinion, the best work on the subject in the language for the advanced student. The author however presupposed an acquaintance with the details of physiological anatomy on the part of his readers, and this while a convenience to a certain class, has proved a serious drawback to the use of the work as a text book for use in our schools. We have therefore looked forward to the appearance of an American edition, with the hope that under the able editorship of Dr. Reichert, this deficiency might be supplied. The book before us surpasses our expectations. Nothing has been omitted from the last English edition, but about one hundred and forty pages of additions have been made by the editor, in most cases with much conciseness and much good judgment. The illustrations have been increased from seventy-two to two hundred and fifty-nine. The work itself is above criticism. The ripened intellect of the author weighs with laborious minuteness the investigations of physiologists past or present, sifts out truth from error, and discusses conflicting theories with a fairness, fullness and conciseness which lends freshness and vigor to the entire book. Such enormous advances have been made recently in our physiological knowledge, that it is safe to say that physicians whose libraries contain works on this subject

issued ten, nay, even five years ago, are behind the times. Every man who wishes to march in the vanguard of his profession should possess this book, and by all means buy the American edition. The book contains nearly 1,100 pages. The publishers' work is well done.

D.

The Venereal Diseases, including Stricture of the Male Urethra. By E. L. KEYES, A. M., M. D. New York: William Wood & Co. 1880.

This work is an octavo volume of three hundred and fifty pages, one of Wood's Medical Library Series. The writer is well known as the author of a number of papers upon the so-called tonic treatment of syphilis. In connection with Dr. Van Buren he has also written a standard work upon Venereal Diseases. The present work is especially noted for being concise and practical. In the author's words, it has been his aim "to present the various venereal diseases as clearly as possible, avoiding such unnecessary refinement upon theoretical and mooted points as would be apt to lead to confusion or to error. Practical utility, as well as what I believe to be sound doctrine, has been kept constantly in view. . . ." That the author is thoroughly qualified to write upon venereal diseases, is too well known to need affirming; but if such were needed, this work would be a sufficient proof. Especially to those general practitioners who desire a standard work essentially practical, do we recommend this volume.

V. P.

The Therapeutics of Gynecology and Obstetrics. By WILLIAM B. ATKINSON, A. M., M. D. Philadelphia: D. G. Brinton, 115 South Seventh St., 1880.

This book of three hundred and fifty pages is one similar in purpose and character to the preceding, but, as is evident from the title, is more limited in scope. To our mind it contains a large number of good prescriptions, these have been obtained from the most eminent gynecologists of this and other countries. The work cannot fail to be a great aid to those who do not happen to be specialists.

V. P.

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